

# Industry Skill Standards

## Development of Industry Skills Standards in Hawaii

- Business Services
- Construction, Repair and Maintenance
- Environmental Technology/ Agriculture
- Health Care Services
- Hospitality and Tourism

Help  
Exit

# **The Development of Industry Skill Standards in Hawai‘i**

**February 1997**

**by**

**Business Services Skill Standards Committee**

**Construction Skill Standards Committee**

**Environmental Technology/Agriculture Skill Standards Committee**

**Health Services Skill Standards Committee**

**Hospitality & Tourism Skill Standards Committee**

**for**

**Department of Labor and Industrial Relations**

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# **The Development of Industry Skill Standards in Hawai'i**

Hawai'i won a federal School-to-Work (STW) implementation grant in order to improve the preparation of students in K-16 for the world of work. STW is contextual learning which makes students' courses relevant to what they will need to know when they are employed; and which brings their school work to "life" when they see why they should know something and how they will use it in the workplace.

The federal STW law provides states with planning and implementation grants to develop STW systems. In September 1995, Hawai'i's STW grant proposal was approved, thus providing the state with \$10.2 million in federal funding over a five-year period. Under the grant, the State Department of Labor and Industrial Relations is charged with overseeing the development of industry skill standards for five industries:

1. Business and Financial Services
2. Construction, Maintenance and Repair
3. Environmental Technology / Agriculture
4. Health Services
5. Hospitality and Tourism

Employers are the ones who know what the young people need to know and be able to do to succeed in the workplace. So the State Labor Department asked representatives of the five industries to form five committees and define the knowledge, understanding and demonstrable skills needed in their workplaces. Their work will be completed by April 1997.

## **What are Industry Skill Standards?**

The National Governors Association provides the most useful way to show the relationship among academic, work-readiness, and industry skills and more specific occupational skills. It is a **stairstep** of increasingly **more specific sets of skills and knowledge** that are required as one moves from **1) a purely school-based orientation** to **2) a broad industry or occupational focus** and then to **3) a more job-specific focus**.

1. Academic and work-readiness skills relate to high-level skills that everyone needs to function in a high-performance economy, *regardless of the specific career they pursue*. These are referred to as SCANS skills. (See Appendix A)

2. **Industry skills relate to a common set of the skills and knowledge that workers generally need to perform in high-performance workplaces *within broad industrial or occupational clusters*.** [This level is the focus of Hawai'i's Industry Skill Standards.]
3. Other workplace skills, including those already developed by industry and professional associations, unions, licensing authorities, and individual firms -- and perhaps some of those being developed under the federally supported pilot projects -- relate to what workers currently need to know and be able to do *in either specific occupations or specific jobs*.

### **Findings of the Industry Skill Standard Committees**

- All the industry committees support the SCANS skills.
- All the industry committees have skill standards on:
  - workplace law and ethics
  - cultural awareness and sensitivity
  - spirit of Aloha
  - teamwork/leadership
- Each committee provides industry-specific skill standards in:
  - oral and written communication
  - mathematics (specifically, hands-on math from the workplace)
  - safety, sanitation, security
  - science (especially the Environmental Technology and the Health industries)
  - technology
- Each committee provides other industry-specific skill standards. (See their individual reports.)

Appendix D (to come in April 1997) shows the similarities and transferability between the five industry skill standards.

## How Can Industry Skill Standards Be Used?

### 1. Contextual learning projects

Any teacher in any grade can select one or more skill standards to design contextual learning projects in cooperation with business. With the Industry Skill Standards in hand, the teachers will know what expertise and expectations the industry partners can bring to the project.

### 2. Certificate of Advanced Mastery (CAM)

In Hawaii's School-to-Work reform effort, high school students will be able to choose one of six career pathways for exposure to the actual world of work and expanded work-based learning. In some schools, career majors will be available. Schools which receive funds from Hawaii's federal STW implementation grant are to re-design curriculum and require work experience to help students meet industry skill standards. Industry committees have developed and validated industry skill standards for Certificates of Advanced Mastery in these five industries: Business, Construction, Environmental Technology / Agriculture, Health, and Hospitality.

### 3. College

The Hospitality and Environmental Technology committees describe skill standards for the Community Colleges to include in their programs. Further, Environmental Technology describes the skill standards to be included in a four-year program.

### 4. Workplace

Industry skill standards also have workplace uses. Improved workplace quality and productivity and therefore global competitiveness and enhanced economic development can be achieved if:

- a. existing workers increase their value, security, portability and career advancement by training up to all the industry skill standards;
- b. minimum qualifications are no longer tied to time spent in a job title, but are tied to the actual skills that a person is able to perform; and
- c. employers actually use and expect the skill standards every day.

Significant workplace issues in the STW equation center on how ready the workplace will be to receive highly skilled graduates who are critical thinkers, ready and able to make decisions on the frontline. The strategy is to set industry skill standards for the 80% of the future workforce who are already in the workforce.

## **Will Industry Skill Standards Sit on the Shelf?**

Industry skill standards are intended as statewide norms, unvaried across districts and schools. The standards will form the basis of portable skill standard certificates earned by STW completers. How instruction is organized and student achievement is assessed will continue to be school responsibilities.

### **Is there confusion with other DOE reform efforts?**

The Board of Education (BOE) approved the *Hawai'i Content and Performance Standards* (HCPS) in June 1994. The HCPS is from the Commission on Performance Standards and is the BOE's priority document. There is an 80% mesh between HCPS and two supplemental DOE documents, *Essential Content* and *Student Outcomes*. In 1997, the Commission will call for suggested amendments to HCPS.

DOE's nine Curriculum Generalists are working with the K-12 schools to bring the curriculum in line with HCPS. The Social Studies Curriculum Analysis by a second grade teacher on HCPS (Appendix C) is a good example of this curriculum alignment. DOE is planning to develop sample curriculum units and corresponding assessment measures.

By October 1997, all schools are to have incorporated the content of the HCPS into their curriculum without adding to the graduation requirements. (The graduation requirements are presented in Appendix B.) This means some HCPSs, such as four years' foreign language study in grades 7-12, are not being implemented. Time spent in school may also be a barrier to the implementation of some content.

#### **To summarize the expectations for high school students:**

- A high school graduate will have met the DOE graduation requirements. (Appendix B).
- By October 1997, without adding to the graduation requirements, the curriculum will have incorporated the *Hawai'i Content and Performance Standards* (HCPS).
- In addition, students who earn the Certificate of Advanced Mastery will have met Industry Skill Standards, because the standards and work experience will have been incorporated into their curriculum.

## **Where do industry skill standards developed for School-to-Work fit into other DOE reform efforts?**

It would be easiest for schools if there was considerable mesh between the industry skill standards and the HCPS. However, the purpose in asking industry to define their skill standards is to determine if there is a gap between what career majors should know and do and what they are currently being taught. Where there is a mismatch, curriculum will need to be revised to incorporate the industry skill standards.

Industry committees are looking for this mesh by performing a "crosswalk" between their skills, the HCPS, and DOE's *Essential Content* and *Student Outcomes*. Educators will be helpful in showing how the industry skill standards can provide work-related activities and examples in the classroom and/or learning objectives at employers' work-based learning sites for high school students.

When the industry skill standards do not mesh well with the HCPS, or other barriers hinder their implementation within DOE, there will be opportunities to:

- Amend the Hawaii Content and Performance Standards (HCPS).
- Gain Board of Education (BOE) approval of SCANS.
- Gain BOE approval of industry skill standards.
- Seek changes to the time spent in school; i.e., length of the school day and/or school year.
- Seek to create more career academies, tech-prep programs, cooperative education, contextual learning at all grade levels, and other work-based curriculum.
- Seek curriculum development assistance from PREL, UHCRD, VTECS, and other consultants, to ease teachers' load in implementation.



# Quoted from JOB SKILLS FOR THE 21ST CENTURY

By Lawrence K. Jones

BASIC SKILLS		
<b>Reading:</b> identify relevant facts; locate information in books/ manuals; find meaning of unknown words; judge accuracy of reports: use computer to find information.	ideas and effort; do own share of work; encourage team members; resolve differences for the benefit of the team; responsibly challenge existing procedures, policies, or authorities.	
<b>Writing:</b> write ideas completely and accurately in letters and reports with proper grammar, spelling, and punctuation, use computer to communicate information.	<b>Cultural Diversity:</b> work well with people having different ethnic, social, or educational backgrounds; understand the cultural differences of different groups; help the people in these groups make cultural adjustments when necessary.	
<b>Mathematics:</b> use numbers, fractions, and percentages to solve problems; use tables, graphs, and charts; use computer to enter, retrieve, change, and communicate numerical information.	PERSONAL QUALITIES	
<b>Speaking:</b> speak clearly; select language, tone of voice, and gestures appropriate to audience.	<b>Self-Esteem:</b> understand how beliefs affect how a person feels and acts; "listen" and identify irrational or harmful beliefs you may have; and understand how to change them when they occur.	
<b>Listening:</b> listen carefully to what person says, noting tone of voice and body language; respond in a way that shows understanding of what is said.	<b>Self-Management:</b> assess own knowledge and skills accurately; set specific, realistic personal goals; monitor progress toward goal.	
PEOPLE SKILLS		<b>Responsibility:</b> work hard to reach goals, even if task is unpleasant; do quality work; display high standard of attendance, honesty, energy, and optimism.
<b>Social:</b> show understanding, friendliness, and respect for feelings of others; assert oneself when appropriate; take an interest in what people say and why they think and act as they do.	THINKING SKILLS	
<b>Negotiation:</b> Identify common goals among different parties; clearly present your position; understand party's position; examine possible options; make reasonable compromises.	<b>Creative Thinking:</b> use imagination freely, combining ideas or information in new ways; make connections between ideas that seem unrelated.	
<b>Leadership:</b> communicate thoughts and feelings to justify a position; encourage or convince; make positive use of rules or values; demonstrate ability to have others believe in and trust you because of competence and honesty.	<b>Problem-Solving:</b> recognize problem; identify why it is a problem; create and implement a solution; watch to see how well solution works; revise as needed.	
<b>Teamwork:</b> contribute to group with	<b>Decision Making:</b> identify goals; generate alternatives and gather information about them; weigh pros and cons; choose best alternative; plan how to carry out choice.	
	<b>Visualization:</b> imagine building, object, or system by looking at a blueprint or drawing.	

## DOE Graduation Requirements

CREDITS	HS DIPLOMA	BOE DIPLOMA
Required	14 credits	18 credits
English	4	4
Social Studies	4	4
Mathematics	3	3
Science	3	3
Physical Education	1	1
Health	1/2	1/2
Guidance	1/2	1/2
One of the following:		
Foreign Language		2
Performing/Fine Arts		2
Vocational Education		2
Electives (any course)	6 credits	6
TOTAL	22 credits	24 credits

### ESSENTIAL COMPETENCIES

1. Read and use printed materials from daily life. These include the newspaper, telephone book, road maps, charts and graphs commonly used in public media, and household product instructions.
2. Complete commonly used forms. These include personal checks, job applications, charge account applications and other similar forms.
3. Demonstrate writing skills commonly used in daily life. These include writing directions, telephone messages, letters of inquiry or complaint, and personal correspondence.
4. Communicate orally in situations common to everyday life. These include giving simple directions and answering questions about directions or instructions, expressing personal opinions on a topic and responding to questions topic, and describing an object.
5. Use computational skills in situations common to everyday life. These include adding, subtracting, multiplying, and dividing whole numbers, adding and subtracting dollars and cents, and computing discount and simple interest.
6. Read and use scales on standard measuring devices. These include rulers, measuring cups and spoons, thermometers and weight scales.
7. Interpret common visual symbols. These include traffic signs and road markings, directions to public facilities, and caution and warning labels and signs.
8. Reach reasoned solutions to commonly encountered problems. Reasoned solutions are those that incorporate the facts at hand, the constraints on the solution, the feasibility of carrying out the solution, and the value of those affected by the solution. Commonly encountered problems include decisions about family finance, career plans, physical health, and community issues.
9. Distinguish fact from opinion in TV and radio news broadcasts, advertising, newspaper and magazine articles, and public speeches.
10. Use resources for independent learning. These resources include the library, informed persons, and public and private agencies.

11. Identify the positive effects of good eating and sleeping habits, good personal hygiene, and avoidance of tobacco, alcohol, and prohibited drugs.
12. Identify factors to be considered in work and career decisions.
13. Demonstrate knowledge of the basic structure and functions of state and local governments.
14. Demonstrate knowledge of the citizen's opportunities to participate in political processes. These include voting, running for office, contacting elected representatives, and participating in election campaigns.
15. Demonstrate knowledge of important citizen rights and responsibilities. These include the rights guaranteed by the Constitution and knowledge of traffic laws and major criminal offenses.
16. Demonstrate knowledge of the diversity and interdependence of the world people and societies.

### Hawaii State Test of Essential Competencies

(HSTEC)

#### •HIGH SCHOOL DIPLOMA

The High School Diploma shall be issued to students who have met all graduation requirements.

#### •BOE RECOGNITION DIPLOMA

The Board of Education Recognition Diploma is awarded to students with grade point averages of 3.0 and above who successfully complete additional required coursework (see credits)

To students who meet the requirements, the BOE Recognition Diploma is awarded.

- *Cum Laude* with a GPA of 3.0 to 3.5
- *Magna Cum Laude* with a GPA of 3.5 to 3.8 and
- *Summa Cum Laude* with a GPA of 3.8 and above

#### •CERTIFICATES

Certificates that do not constitute graduation from high school are issued to regular and disabled students for completion of specific program requirements.

- Certificate of Course Completion shall be issued to students who have met course and credit requirements but have not demonstrated mastery of the Department's essential competencies
- Certificate of Completion of an Individually Prescribed Program shall be issued to specifically identified disabled students who complete all requirements set by the program.

## APPENDIX C

From Hawaii State Commission on Performance Standards

### Social Studies Curriculum Analysis

by

Nancy Camit, Second Grade Teacher at Kahuku Elementary

I enjoyed doing this project because right now at my school we are doing curriculum analysis of all major subject areas and trying to align with the grade levels above and below us. We finished math this year; and in September we will be analyzing writing, science, and social studies.

Students are not being taught all the concepts listed in the new State Standards. I found several holes in my program that need to be filled. The main thing I noticed is that I need to bring more focus down to how events affect us here in Hawaii, make it more personal for the children. For example, when studying history and culture use the children's family history and culture. This will make it more personal and hopefully more interesting to them.

I feel the students are being tested on what is presented in the classroom. I really like the textbook we have, *Some People I Know*, published by Houghton & Mifflin Company. The activities call for higher level thinking type skills and the tests demand much writing and thought, not just recall type questions. They fit well with the textbook. I also make up my own tests and activities. The SAT (Stanford Achievement Test) has very simple low level type questions. The textbook tests were much more demanding because they used more thinking and analysis type questions than the SAT. As a result my students did very well on the Environment (science and social studies) section of the SAT because the questions were easy. It did not challenge the children thinking skills at all. Only three children scored in the low stanines (1, 2, and 3). Nine children scored in the middle or average stanines (4, 5, and 6). And 14 children scored in the high stanines (7, 8, and 9).

I do not recall that any of the SAT questions covered anything about Hawaii. There are no questions about famous Hawaiians in history, about the Splintered Paddle, about the Hawaii State Motto, or about Pacific navigation charts. So I feel my curriculum is good as far as the SAT goes, but it needs some work in bringing social studies subjects to focus more on Hawaii. I also need to add some alternate ways of assessing learning such as drama, writing, poetry, songs, pictures, and role playing to name a few. I need to give the children the opportunity to pick more of their own learning activities. I want to know how they would choose to learn about something and how they would choose to show what they have learned.

I use many other resources to cover areas I feel are important for the children. Please, see my resource list pages. I also use literature in my program to increase interest. Children love to listen to stories read aloud by the teacher and others.

According to my curriculum analysis I need to add some areas to my social studies program. In the area of cultural anthropology I need to add a unit on student cultures so the children have an opportunity to explore their own culture, share their culture with their peers, and learn about other students' cultures. This is a very important area that can help with cultural acceptance of all races. It can be a tool used against racism. The sooner children learn about other cultures and see how very much alike we all are, the sooner, hopefully, we can stop racism from being planted in their minds. Children also need to see the beauty of differences in people and other cultures and to find appreciation and acceptance of other nationalities. Children should be proud of their own culture, but also accept other cultures. All cultures of the world have in some way added goodness and beauty to our world as a whole.

In the area of history I need to add the Hawaii State Motto (Ua mau ke ea o ka aina i ka pono) and its meaning, the Law of the Splintered Paddle, concepts of time (past, present, and future), famous Hawaiians of the past and present, and contributions of the people of Hawaii. These are subjects formerly covered in fourth grade only. I plan to introduce these people, events, and concepts of Hawaii into my program: King Kamehameha I, the design of the Hawaiian Flag, Kamehameha II (Liholiho), the end of the arrival of Calvinist Missionaries, Kamehameha III (Kauikeaouli), establishment of the first successful sugar plantation in the islands, writing of the first constitution, writing of the Hawaii State Motto, the Great Mahele or land division, arrival of the first Chinese laborers, Kamehameha IV (Alexander Liholiho), Queen's Hospital, Kamehameha V, the establishment of the Hansen Disease Colony on Molokai, the arrival of the first Japanese plantation workers, Father Damien, Queen Emma, Queen Liliuokalani, the writing of the Hawaii State Anthem ("Hawaii Pono'i"), Queen Liliuokalani's abdication, and the statehood of Hawaii in 1959. I plan to use a timeline in the classroom for presentation of these events.

In the area of geography I need to add the location of Kahuku on the world map, the use of computers to teach geography, and South Pacific navigation charts; and I need to expand my environment unit to cover alternate uses of the environment and its resources. Again the study of South Pacific islands has been in another grade level. I do cover world geography from the location of all continents, oceans, countries of North America, and the location of the Hawaiian Islands. I feel I need to add more in the area of the South Pacific Islands, especially ones our children come from. Again this goes back to self origins for the children. I also need to add the following major geographical formations and features.

1. the major rivers of the world
2. the major mountain ranges of the world
3. tropical grasslands (savannas) of the world
4. cool grasslands (prairies) of the world
5. tropical rain forests of the world
6. forests of the world

The areas in the economic portion of the standards are covered well by our textbook and other resources I use in my lessons. It might be a good idea to focus on the economy of Hawaii, Oahu, and then Kahuku. How do people in Kahuku make a living? In my program we talk about how their parents earn money, how they (the children) want to earn money when they get older, and how they can earn money as children. But I do not cover how business, services, and agriculture intertwine to form our Kahuku economy. How is Kahuku dependent on the state economy? For example, how do certain foods not grown in Hawaii get to Kahuku? Or, how does food grown in Hawaii get to other parts of the world?

In the area of political science and citizenship I need to add an area about how common goods can be strengthened through various forms of citizen action. What can I do as an individual to help better the lives of all people? My textbook does a pretty good job covering the other areas. I also use the STAR Program that is a citizenship program. One thing I would like to add is how children in our community can help the elderly in Kahuku, or get involved in some kind of community project. Quite a few of the children are involved in clean up days at the beach and along the highway with their parents.

I would also like to add some resources such as videos, ETV, the Discovery and Learning Channels, along with my National Geographic magazines and videos I use now. I need to explore and use more visuals and computer programs in my curriculum.

My recommendations for my classroom would be to get started on the areas I have mentioned above and add them to my program. I would also share it with my grade level. We work well together and try to help each other to constantly upgrade our programs. We feel consistency within the grade level is very important. I would share my curriculum analysis with them, encourage them to evaluate their programs, to look for "holes," collect and list resources for them, and assist them in anyway possible.

# HAWAII BUSINESS SERVICES INDUSTRY SKILLS

September 1997

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## **INTRODUCTION**

In September 1995, Hawaii was granted federal funding to implement the Hawaii School-to-Work Opportunities system (STW). The basic intent of the plan is to ensure that every student in the state has the necessary skills to succeed in the twenty-first century.

Under the grant, the State Department of Labor and Industrial Relations is charged with overseeing the development of industry skill standards for five economic/employment segments identified as high skill, high wage growth industries for Hawaii and the Pacific Region in the next century.

- Business Services
- Construction, Repair and Maintenance
- Environmental Technology/Agriculture
- Health Care Services
- Hospitality and Tourism

### **What are Skill Standards?**

Development of skill standards is a collaborative effort by the industry and education sectors to:

- Communicate the requirements of the modern workplace.
- Bring school work to "life" when students see why they should know something and how they will use it in the workplace.
- Promote high performance workplace practices to strengthen our state's global competitiveness.
- Facilitate lifelong learning to raise workforce skills, which increase worker security and mobility with the labor market.
- Improve the quality and accountability of education and training programs to better prepare people for work.

Within this context, skill standards serve as a common language that focuses on the knowledge and skills individuals must learn rather than the how, when, and where of the learning process.

Hawaii uses the Goals 2000 definition of a Skill Standard: a standard that specifies the level of knowledge and competence required to successfully perform work-related functions within an occupational or industrial cluster.

The five Hawaii committees have identified the industry skills and extended definitions. The skills can graduate into standards when the performance criteria are developed by local partnerships at the lead sites.

In each industry area, the skill standards developed will culminate in a portable skill certificate certifying mastery of skills that are at least as challenging as voluntary skill standards ultimately endorsed by the National Skill Standards Board (NSSB). The Goals 2000 legislation established the NSSB to encourage the creation and adoption of a national voluntary system of skill standards.

NSSB recommends that standards be developed for three levels of knowledge and skills ranging from broad to specific:

- Core
- Concentration
- Specialties

#### **Framework for Skill Standards for the Business Services Industry**

The 15 Business Services industry skills are presented on the Skills Assessment Form and reflect the areas of performance expected and evaluated by employers. The Skill Area Lists provide detailed projects, tasks, and extended definitions to clarify the general skill areas on the Skills Assessment Form.

## **How Can Industry Skills Be Used?**

### **Contextual Learning Projects**

Any teacher in any grade can select one or more skills to design contextual learning projects in cooperation with business. With the industry skills in hand, the teachers will know what expertise and expectations the industry partners can bring to the project. For example, see the section on Capstone Projects; also some detailed projects and tasks in the Skill Area Lists. Projects and tasks in this report are designed as suggested guidelines. Specific assignment requirements are left to the discretion of the instructor. Additional projects which accurately reflect the demands of the business environment should be sought through the local partnerships.

### **Work-based Learning**

Some skills communicate what students should be able to do before they report for their work-based learning experiences.

### **Skill Certificates**

In Hawaii's School-to-Work reform effort, high school students will be able to choose one of six career pathways for exposure to the actual world of work and expanded work-based learning. In some schools, more specific career majors will be available. Schools which receive funds from Hawaii's federal STW implementation grant are to re-design curriculum and require work experience to help students meet industry skill standards.

All the industry committees support the SCANS skills. These are core skills which all high school graduates need. Each committee provides industry-specific skill standards in all aspects of industry:

- workplace law and ethics
- cultural awareness and sensitivity
- teamwork/leadership
- understanding of the industry/economy
- oral and written communication
- mathematics
- safety, sanitation, security
- technology
- other areas

### **College**

The University of Hawaii's goal is to develop alternate admissions criteria which will be based on demonstrated competency achievement that will be congruent with the skill certificates.

## **Workplace**

Industry skill standards also have workplace uses. Improved workplace quality and productivity and therefore global competitiveness and enhanced economic development can be achieved if 1) existing workers increase their value, security, portability and career advancement by training up to all the industry skill standards; 2) minimum qualifications are no longer tied to time spent in a job title, but are tied to the actual skills that a person is able to perform; and 3) employers actually use and expect the skill standards daily.

Significant workplace issues in the STW equation center on how ready the workplace will be to receive highly skilled graduates who are critical thinkers, ready and able to make decisions on the frontline. The strategy is to set industry skill standards for the 80% of the future's workforce who are already in the workforce.

### **Implementation of the Industry Skill Standards**

#### **Business Services Committee Recommendations**

Two major concerns identified by the Business Services Committee centered on implementation issues:

- development of a system for the measurement and evaluation of skills, tasks, and projects, and effective utilization of the assessment form; and
- teaching methods which support and simulate the expectations in the work environment.

An additional issue involves establishing training/education requirements for teachers to ensure:

- expertise in the Business Services skill areas; and
- current knowledge of work environment expectations, job duties and skills, and business issues and trends.

#### *Recommendation: Measurement and Evaluation*

A system for skill measurement and assessment should be defined for all students at all levels. Once developed, technical skills and the assessment form can be formatted and aligned.

*Recommendation: Work Environment Simulation*

Classrooms should simulate work environment expectations:

Students:

- work in groups to solve problems;
- justify answers - there is usually more than one right answer;
- self initiate and manage projects;
- utilize teacher for information, resources, and assistance;
- communicate information that is acquired, evaluated, organized, and interpreted, to appropriate audiences;
- routinely work with teachers, peers, and community members.

Students and teachers plan and negotiate activities.

Assessments/evaluations are qualitative, by self, peers, teachers.

Activity and experimentation are major components to learning.

Timelines and time management are the responsibility of students.

In fact, the committee developed Capstone Projects, which encompass a larger cope of skills and technical knowledge essential to meet the demands of the business work environment. Capstone projects are outlined separately and require a combination of skills from more than one skill area.

*Recommendation: Teacher Training*

The Department of Education should revise teacher qualifications and/or competencies, and preservice and inservice training, to meet technical curriculum requirements. The Department of Education and the University of Hawaii-Schools of Education and Business should coordinate technical requirements for new teachers to develop expertise in business areas.

Teachers should participate in internships involving all areas of business. Internships could encompass one to a few areas of business at a time. For example, a retail internship might include exposure to positions in sales, buying, and display; a marketing internship might include exposure to positions in advertising, media, and graphic arts; a human resources internship might include exposure to positions in recruitment, training, and payroll.

*Recommendation: Teaching methodologies*

The following methodologies are suggested in conjunction with the Business Services Industry Skills.

- Instruction and curricula should be based on applied methodologies, interdisciplinary connections, and team/coordinated teaching strategies. Technical and academic teachers should coordinate assignments, examples, exercises, and curricula.
- Teach an entire applied academic subject or single academic units and modules with curriculum materials that are team-developed.
- Utilize a class project to integrate math and/or communication skills with technical skills; e.g., students may form a business that manufactures and sells a product.
- Present students with problems to be solved in the technical class, teach the general competencies for successful solutions in the academic class, and develop solutions in the technical areas.
- Develop projects that bridge technical areas and academic context as is the strategy underlying Capstone Projects; e.g., a career research assignment can culminate in a research paper that receives credit in both a required career exploration course and a freshman English class.
- Develop a unit or project with a theme that links a technical and academic subject. For example, a foreign language and computer class can be aligned to develop a computer program that tests language knowledge; a journalism and English class can be aligned to help students produce a magazine or newspaper issue.
- Students should be provided with applied and contextual learning opportunities.
  - Develop a variety of writing-to-learn activities - class minutes/summaries, reaction sheets, activity summaries, memos, letters, and comments.
  - Use job search activities to reinforce language skills such as the preparation of letters of application, resumes, and application forms, or crossword activities and word games using job-related vocabularies.

- Design analytical activities to reinforce math and science skills such as using scientific measuring devices; reading; interpreting and creating graphs, charts, tables, recipes, and math story problems.
- Provide real-life reasons for learning academic content and more collaborative student-centered forms of learning.
- Map a community need or local business strength with a class project.
- Use lab experiments that provide real situations in which both instructors and students do not know the outcomes and, therefore, successes and failures are not predetermined.

### **Technical Assistance Committee Recommendations**

Starting in spring semester 1998, up to nine demonstration projects -- one for each industry -- may be implemented in high schools interested in establishing career majors in the five targeted industries. This is where the performance criteria will be established, and the full development of the skill standards will be achieved. The technical assistance committee of the STW Executive Council has mapped out the developmental scheme the schools should follow:

- Select industry skills to work on
- Define level of competency for each skill, thus creating the skill standard
- Describe career major: sequence of courses/modules/etc.
- Integrate skill standards into curriculum
- Develop assessment tools to determine if a student has achieved the competency level
- Address equity issues
- Implement career major at lead sites
- Describe criteria for issuing certificates
- Design what the certificates would include

Then the STW stakeholders would need to establish statewide procedures regarding portable certificates and make these certificates meaningful to community colleges and to the workplace.

The Department of Education's Integration and Tech Prep conferences provide major technical assistance to the local STW partnerships on:

- Modifying curriculum/teaching strategies
- Setting levels of competence for the skill standards when developing/piloting the curriculum in a career path
- Selecting and developing assessment tools
- Providing alternative methods of assessments, without lowering standards, for special needs populations
- Interning at businesses to gain greater teacher understanding of the non-educational workplace environment

#### **The Business Services Skills Committee**

The Business Services Industry Skills were developed by a committee whose members represent both public and private stakeholders. Appendix C describes the method and participants. Reaction and input are welcomed and will be used to revise the skills.

**[Fax input to Workforce Development Council at 586-8674.]**



# SKILLS ASSESSMENT FORM

## Business Services Skills Assessment

Rating Scale	Adv.	Advanced - exceeds standard; demonstrated superior skills
	Pro.	Proficient - meets standard; demonstrated satisfactory skills
	ND	Needs Development - skill area needs development
	NA	Not applicable - performance was not observed

### EMPLOYABILITY SKILLS

- \_\_\_\_\_ Professional Image: Dresses appropriately for the job; employs practices to maintain a professional image; maintains poise in familiar & unfamiliar situations.
- \_\_\_\_\_ Attitude: Exhibits a positive attitude, self-confidence, self motivation; demonstrates a sense of pride in work assignments; receptive to new ideas, processes, and people.
- \_\_\_\_\_ Responsibility: Displays dependability, arrives on time and ready to perform; completes assignments; and accepts responsibility for own actions.
- \_\_\_\_\_ Time Management: Manages time and completes assignments on time, allocates time to activities including revisions; prepares & follows schedules.
- \_\_\_\_\_ Personal Improvement: Demonstrates an interest in learning beyond current needs, and improving skills, at own initiative.
- \_\_\_\_\_ Ethics: Demonstrates honesty, integrity, tactfulness, and discretion.

### COMMUNICATION & INTERACTIVE SKILLS

- \_\_\_\_\_ Group/Public: Exchanges ideas in a variety of situations; conducts organized and effective meetings and presentations; participates in and facilitates group communication.
- \_\_\_\_\_ Oral/Verbal: Speaks clearly and concisely using standard English; relays information accurately; speaks a 2nd language. Avoids inappropriate uses of pidgin, slang, and profanity.
- \_\_\_\_\_ Non Verbal: Demonstrates knowledge of cultural practices; uses professional posture; smiles; uses eye contact constructively.
- \_\_\_\_\_ Listening: Differentiates message from delivery; asks for clarification; utilizes active listening techniques; repeats instructions, messages, & understanding for confirmation.
- \_\_\_\_\_ Writing: Prepares business related documents using proper business style, format, and content including appropriate vocabulary, and inclusion of all necessary information; utilizes resources and finds good examples.
- \_\_\_\_\_ Reading: Comprehends technological/industrial information i.e. trades/industry specific publications; follows written directions; expresses comprehension through restating or summarizing.
- \_\_\_\_\_ Client: Communicates with clients politely and appropriately; records and delivers information clearly and accurately; delivers messages in a timely manner; manages conflicts in a calm, professional manner.
- \_\_\_\_\_ Interaction: Interacts positively with people of both genders, all ages, differing cultural backgrounds, and those with special needs; works cooperatively as a team member in group settings; offers ideas, information, and opinions; assumes a fair share of the work.

### THINKING & PROBLEM SOLVING SKILLS

- \_\_\_\_\_ Creative Thinking: Generates new ideas or innovative ways of doing things.
- \_\_\_\_\_ Problem Solving: Identifies problems, evaluates information, and defines appropriate solutions; evaluates and selects the set of procedures, tools, and/or machines, including computers and softwares, which produce the desired results.
- \_\_\_\_\_ Information Gathering: Identifies need for data, locates and organizes information from relevant sources

i.e. manuals, files, internet, experts, publications or creates it, and evaluates its relevance and accuracy; selects and analyzes information and communicates the results to others using oral, written, graphic, pictorial, or multi-media methods.

\_\_\_\_\_ Rational Reasoning: Utilizes mathematical concepts to appropriately estimate, measure, and calculate.

#### OTHER BUSINESS CORE SKILLS

\_\_\_\_\_ Safety: Follows safety rules; operates equipment properly; maintains safety equipment; understands OSHA rules & regulations.

\_\_\_\_\_ Career Exploration: Translates business career options into skills, knowledge, & experience necessary for employability; and formulates career plan(s). Prepares for and interviews with poise and confidence.

\_\_\_\_\_ Life Skills: Utilizes analytical tools and technology such as computers, spreadsheets, accounting/finance principles, and economic theory, to plan, organize, & allocate personal resources.

#### SUPERVISORY/MANAGERIAL & LEADERSHIP SKILLS

\_\_\_\_\_ Management: Coordinates project planning, and organization; facilitates group effectiveness; provides motivation and encouragement.

\_\_\_\_\_ Leadership: Creates a vision/objective/goal; defines alternative paths for achievement; fosters a supportive climate.

#### INFORMATION & COMPUTER TECHNOLOGY SKILLS

\_\_\_\_\_ Information Technology: Assesses information needs; evaluates hardware components, software applications, operating systems, and communication hardware; maintains operation and care of hardware and software. Utilizes on-line reference tools, word processing, spreadsheet, database, and multimedia applications to complete assignments.

#### GENERAL BUSINESS SKILLS

\_\_\_\_\_ General Business: Plans and operates a business including creating the business structure; designing, producing, and marketing products & services; establishing human resource planning & policies; accounting for external environmental factors.

# CAPSTONE PROJECTS

Hawai'i Business Skills Standards  
Life Skills Project Outline

CAPSTONE PROJECT		
Develop a Life Plan		
-identify personal priorities, issues & concerns @ different life stages; -identify options & resources to resolve personal business needs; -project budgets & spending plans.		
SKILL AREA PROJECTS	PROJECT COMPONENTS	SKILL AREA TASKS (refer to detailed listing)
<i>Financial Transactions</i>  Financial Plan	Financial Planning	Life Skills: Financial Transactions Life Skills: Legal Transactions Life Skills: Consumer Transactions
	Budget	
	Investments	
	Insurance	
	Taxes	
	Record keeping	
<i>Legal Transactions</i>  Legal Plan	Property	Life Skills: Financial Transactions Life Skills: Legal Transactions Life Skills: Consumer Transactions
	Wills & Trusts	
	Domestic Relations	
	Contracts	
	Liability	
<i>Consumer Transactions</i>  Spending Plan	Consumer Rights & Responsibilities	Life Skills: Financial Transactions Life Skills: Legal Transactions Life Skills: Consumer Transactions
	Purchasing Analysis & Decision Making	
ENABLING COMPETENCIES (refer to detailed listings)		
Life Skills		
General Business Skills - External Environment: Economic/Political		
General Business Skills - External Environment: Social/Cultural		
General Business Skills - Products/Services		
Ethics		
Communication & Interactive Skills		
Thinking & Problem Solving Skills		
Career Exploration		

Hawai'i Business Skills Standards  
General Business Project I Outline

CAPSTONE PROJECT Develop a Business Plan		
SKILL AREA PROJECTS	PROJECT COMPONENTS	SKILL AREA TASKS (refer to detailed listings)
Marketing Plan	Marketing Research & Analysis	General Business Skills: Business Planning General Business Skills: Products/Services
	Marketing Strategy	
	Marketing Mix & Commuications	
Financial Plan	Opportunity Costs	General Business Skills: Business Planning General Business Skills: Control
	Start-Up Costs	
	Funding Sources	
	Budgets/Financial & Pro-forma Operating Statements	
Organizational Goals	Organization's Purpose & Mission Statement	General Business Skills: Business Planning General Business Skills: Control
	Strategic Plan	
	Assessment & Measurement	
Organizational Structure	Business Organization (Legal)	General Business Skills: Business Planning General Business Skills: Business Operations General Business Skills: People General Business Skills: Control
	Organizational Structure with Responsibilities & Authority Designation	
	Staffing Plan	
	Stakeholder Communication	
	Location, Facility, and Equipment	
ENABLING COMPETENCIES (refer to detailed listings)		
General Business Skills - External Environment: Economic/Political		
General Business Skills - External Environment: Social/Cultural		
Time Management		
Ethics		
Communication & Interactive Skills		
Thinking & ProblemSolving Skills		

Hawai'i Business Skills Standards  
General Business Project II Outline

CAPSTONE PROJECT Start-up and Manage a Business Entity (similar to Junior Achievement projects)		
SKILL AREA PROJECTS	PROJECT COMPONENTS	SKILL AREA TASKS (refer to detailed listings)
Marketing & Production Activities	Product(s) Design & Manufacturing	General Business Skills: Products/ Services Safety Life Skills: Consumer Transactions Communication & Interactive Skills
	Distribution Channel(s)	
	Sales, Promotion & Advertising Campaign	
Accounting Systems	Start -Up Capital	General Business Skills: Control Information Technology
	Procedures, Controls & Security	
	Recordkeeping: Accounts Receivable, Accounts Payable, Payroll, Petty Cash, Financial Reports, Tax Compliance	
Human Resource & Management Systems	Recruitment, Interview, & Selection	General Business Skills: People Career Exploration Professional Image Attitude Ethics Communication & Interactive Skills Supervisory/Management Skills
	Internal Communication	
	Assessment & Evaluation	
	Training, Operating & Management Procedures, and Legal Issues	
Organizational Activities	Office, Business Space Acquisition & Layout	Life Skills: Legal Transactions Life Skills: Consumer Transactions Life Skills: Financial Transactions Communication & Interactive Skills
	Purchasing: Equipment, Resources, and Supplies	
	Risk Management	
	Licenses, and Legal Compliance	
ENABLING COMPETENCIES (refer to detailed listings)		
Thinking & Problem Solving Skills		
Time Management		
Responsibility		

# SKILL STANDARDS & EXTENDED DEFINITIONS



# PROFESSIONAL IMAGE

Skills
Presents a professional image Demonstrates appropriate social skills in the work setting

## Professional Image Extended Definitions

### SKILL AREA TASK

Build a Portfolio of Materials on Appropriate Business Attire

Select appropriate business attire and demonstrate good grooming  
Differentiate among appropriate business attire (e.g., casual, business-casual, professional business, and formal attire) and select correct attire for specific situations

Define acceptable grooming and personal hygiene  
Practice acceptable personal hygiene and grooming  
Develop good health, nutrition, and physical fitness habits

### SKILL AREA PROJECT

DESIGNATE A "BUSINESS WEEK" where:

1. students dress appropriate and model acceptable behavior for a business environment
2. invited parents, community members, partnership participants can view an open house of students projects such as bulletin boards, portfolios, displays, proposals, presentations
3. students market their program to other students through presentations, tours, student led activities, etc.

Develop time management skills in order to enhance one's personal and professional image  
Relate the appropriate professional image to the work setting  
Discuss the importance of work area and equipment maintenance to professional image and productivity (including impact on safety, health, resource management, cost-productivity)  
Discuss the ramifications of social behavior on professional image  
Discuss the impact of poor performance on professional image

Demonstrate appropriate social skills for the workplace  
Practice discretion, tact, and courtesy in relationships with peers and authority figures

Assert self in familiar and unfamiliar social & business situations.  
Initiate conversations with people outside one's inner circle  
Use courtesy and tact when dealing with others  
Interact with clients, customers, and associates in a businesslike manner

# ATTITUDE

Skills
Exhibits a positive attitude, self confidence, & self motivation Learns from mistakes Demonstrates pride in work Displays enthusiasm & receptiveness toward new ideas, processes, & people Seeks innovative ideas to increase operational & personal effectiveness &/or efficiency Readily adapts to changing situations

## Attitude Extended Definitions

Explain the concept of self-esteem  
Explain the concept and importance of self-understanding  
Explain the role that self-concept plays in one's personal and professional life  
Demonstrate an understanding of the relationship between personal behavior, and self-image and esteem  
Identify own self-concept and design a program to develop a positive self concept and image

Display a knowledge of own emotional capacity and needs, and how to address them  
Exhibit the ability to handle stress  
Use feedback for personal growth

Determine attitudes needed for career success  
Discuss the importance of a job well done

List characteristics inherent in a positive attitude  
Demonstrate positive, upbeat, can-do attitude  
Create a climate where work is enjoyable

Display initiative and enthusiasm in undertaking tasks and projects  
Demonstrate initiative to do more than the minimum required  
Seek work challenges  
Display a sense of pride in work assignments  
Demonstrate confidence through participation in group activities  
Demonstrate empathy for others

Take specific steps to make changes and improvements  
Adapt to changing situations  
Demonstrate receptiveness to new ideas  
Experiment with different systems, methods, and ideas  
Seek innovative ideas or new ways of doing things  
Improvise

Learn from mistakes  
Learn from adversity and take in stride  
Endure stressful situations and to the extent possible, channel it into a productive endeavor

### Working definitions:

Self Concept - (What you are)	Personal characteristics, qualities, roles, etc.
Self Image - (How you see yourself)	Subjective Perception of self (includes emphasis on certain characteristics and repression of others); projected image of self
Self Esteem - (How you feel about yourself)	Prevailing feelings of self concept and image
Initiative -	Making active attempts to influence events to achieve goals; self starting rather than accepting direction passively; taking action to achieve goals beyond what is required; versatile in handling job demands.

# RESPONSIBILITY

Skills
Arrives on time & ready to perform Accepts responsibility for own decisions and actions Follows through on assignments until completion Completes work that is neat, accurate, and professional in appearance Operates within scope of authority adhering to the organization's rules, regulations, and policies

## Responsibility Extended Definitions

### SKILL AREA PROJECT

Set Well-Defined and Realistic Personal Goals

Create a Plan to Achieve Goals and Document Progress Toward Goal Attainment

Describe how family members depend on one another, work together, and share responsibilities

Describe how organized groups and/or functions within an organization work together toward a vision, mission, and/or goal

Understand the relationship between the company's major strategic planning goals, specific objectives, implementation tactics and employee roles

Describe the importance of the dependability, confidentiality, and meeting organizationally defined expectations for a specific job/position

Explain the importance of dress code, attendance, and other expectations in the workplace

Demonstrate personal qualities related to employability (e.g., promptness, attendance, getting along with others, dependability, reliability)

Practice completing assignments in a timely manner, and meeting organizational performance expectations

Demonstrate responsible behavior related to personal property (e.g., homework, portfolio, school/home communications)

Discuss the impact of one's work ethic on worker and workplace productivity

Demonstrate initiative

Assume responsibility for own decisions and actions.

Display a high level of concentration, even when assigned an unpleasant task.

Learn from mistakes

Set high standards

Create own standards of excellence

Attends to details

Complete work that is neat, accurate, and professional in appearance

Follow through on assignments until completion

Participate in and accept personal responsibility for team efforts

Adapt as necessary to complete the team task

Motivate self through goal attainment

Acquire appropriate supplies for completion of a task

Determine when assistance is needed

Demonstrate resourcefulness

Locate applicable assistance resources

Operate within scope of authority adhering to company rules, regulations, and policies

Make decisions based on company goals, policies & procedures

Follow current business operating procedures

# TIME MANAGEMENT

Skills
Manages time and completes assignments on time Calculates the time, personnel and material needs, and costs for projects; anticipating and allowing for problems and/or changes

## Time Management Extended Definitions

### SKILL AREA TASK

Perform a Personal Time Management Analysis for a Given Period of Time

Discuss the importance of time management, both professionally and personally, including the consequences of poor time management skills

### SKILL AREA TASK

Develop and Use a Time Schedule to Meet Multiple Deadlines

Use time effectively to meet established priorities and deadlines or accomplish regular work responsibilities

Establish job priorities

Plan and organize areas of responsibility

Organize work toward defined goals and objectives

Manage work flow

Calculate the time, personnel and material needs, and costs for projects

Complete assignments in a timely manner

### SKILL AREA PROJECT

Develop & Utilize Several Systems for Tracking Multiple Projects and Series of Deadlines

Develop and use systems to organize and track information and assignments

Develop new ideas and approaches to improve work processes and enhance efficiency of own work.



# PERSONAL IMPROVEMENT

Skills
Recognizes performance strengths and limitations Seeks ways to continuously improve self and performance

## Personal Improvement Extended Definitions

### SKILL AREA PROJECT

Interview Someone Working in a Position, of Your Personal Interest, for Their Work (position & employer) History, Educational & Professional Background, Personal and Professional Associations/Affiliations, and Professional Development Plans.

Explain why professional development is a shared responsibility between the business/organization and the individual

Explain the relationship of continuous training to professional development

Describe how learning skills are required in one's personal and professional life

Identify the types of training and human resource development available (i.e., training seminars, continuing education, workshops, conferences, course work, professional associations)

Describe the advantages of networking in order to achieve personal and professional advancement

Recognize performance strengths and limitations

Set goals for improvement

Seek and utilize resources for improvement

Assess personal development progress routinely

Seek ways to continuously improve self and performance

# ETHICS

Skills
Demonstrates honesty and integrity Demonstrates tactfulness and discretion Develops & demonstrates a personal code of ethical behavior Displays a work ethic which meets or exceeds an organization's expectation

## Ethics Extended Definitions

### SKILL AREA PROJECT

Research an Event which involved Ethical Issues.

Create a Timeline which Defines the Issues, Alternative Courses of Action & Associated Ethical Philosophy, Action(s) Chosen, and Resulting Consequences. (for Current Events, Predict Course of Action based on an Assumed Ethical Philosophy, and Predict Resulting Consequences)

Define terms such as ethics, social responsibility, and bribe

Identify the process by which individuals develop the foundation for making ethical decisions

Describe a personal code of ethical behavior

Determine when a decision or behavior conflicts with commonly held personal or societal values.

Discuss ethical systems of different cultures

Exhibit professional behavior in the work environment

Discuss the impact of ethical performance on professional image and job retention

Understand the impact of violating beliefs and codes of an organization, self, or others.

Describe a business code of ethical behavior

Explain the importance of trust for the successful conduct of business

Demonstrate honesty and integrity

Determine ethical courses of action in all work assignments and personal involvement with others.

List business actions that may positively or negatively impact the environment and consumer well being

Give examples of how unethical behavior results in higher prices for consumers (e.g., insurance fraud)

Describe the impact of an organization's structure and culture on ethical decision-making.

Describe ethical conflict created by internal business activities.

Discuss the importance of taking moral responsibility for all oral and written communications and actions taken

Identify ethical business practices.

Discuss examples of honest and dishonest business practices

Distinguish business ethics from social responsibility

Explain the difference between ethics and governmental regulations

Give examples of how unethical behavior leads to governmental regulations

Identify ethical considerations resulting from technological advances (e.g., computer snooping or hacking)

Identify ethical considerations resulting from increasing international competition (e.g., dumping goods on the market at below-cost prices; and trading with countries where unfair labor practices, bribery, and human rights violations exist)

Identify ethical considerations resulting from increasing business positioning with politicians (e.g., should gifts, lobbying, and honoraria be given to political leaders for business gain?)

Identify ethical considerations involving employer/employee relationships (e.g., poor working conditions, hours wasted on the job, employee theft)

Identify ethical considerations affecting consumers (e.g., false advertising, shoplifting)

Discuss common types of unethical behavior in the workplace

Describe employee theft ramifications

Describe ethics in personnel issues

Describe ethics in pricing

Describe ethics in providing misleading information

Describe unfair business practices

Describe unfair competition practices

Discuss elements of opportunity and conflict in the ethical decision-making process

Discuss ethics in procurement of financing

Discuss trade secret regulations

Discuss trade/business secret ethics

Explain ethics in sales

Analyze the effect of unethical behavior on a business, given a problem situation

Identify & describe alternative business actions and evaluate each alternative according to ethical business practices

Solve problems using techniques which include considerations of personal and ethical values

Identify strategies that address and improve ethical behavior in a small business

Demonstrate appropriate work ethic in a business environment

# COMMUNICATION & INTERACTIVE SKILLS

Skills
Follows oral & written instructions Asks for clarification Records and relays information clearly and accurately Repeats instructions, messages, and understanding for confirmation Expresses thoughts and ideas succinctly Composes business documents which are appropriate, clear, correct, and concise, using correct grammar, spelling, and punctuation Prepares documents using proper business format Uses common business vocabulary Communicates with internal and external customers, politely and appropriately Handles complaints with empathy, tact and poise Manages conflict in a calm, professional manner Projects a positive impression on the telephone Organizes and leads discussions Plans and presents effective presentations Builds and maintains cooperative working relationships Works cooperatively as a team member Adjusts communication and behavior to audience Interacts positively with people of both genders and all ages Communicates an understanding of and respect for diverse international customs, practices, and etiquette Knowledgeable about current events, and industry trends Speaks a second language

# COMMUNICATION & INTERACTIVE SKILLS

Group/Public Communication

Oral/Verbal Communication

Non Verbal Communication

Listening

Writing

Reading

Client Communication

Interaction Skills

## **Communication & Interactive Skills Extended Definitions**

Express thoughts and ideas succinctly using various forms of communication (e.g., verbal, written, body language, etc.)

Organize thoughts to reflect logical thinking before speaking

### **Communication & Interactive Skills: Group/Public**

Discuss differences in vocabulary, speaking style, and nonverbals used in the exchange of ideas in a formal/informal setting

Answer questions in formal and informal situations

Practice simple introductions in a variety of situations

Assess an audience in a social situation and select conversation and behavior accordingly

Initiate conversations with people outside one's inner circle

Express interest in and support of the ideas of others verbally & nonverbally

Describe types of relationships which occur between people

Describe elements for building and maintaining types of relationships

Assess the impact of physical environment on meeting success

Plan, organize, and conduct meetings to achieve identified purpose

Determine the wants, needs, and motives of the audience to identify a motivational strategy

Demonstrate proper parliamentary procedures

Participate in group discussion and role playing

Participate in group discussions for problem resolution

Discuss basic concepts of negotiations

Organize and lead discussion

Lead a brainstorming session

Practice team-building concepts

Critique and assess leadership, facilitation, and team building practices of others

Discuss the preliminary steps involved in creating oral presentations

Plan and present short presentations, individually or as a member of a group

Utilize visual aids, props, and other supportive materials in alignment with target audience needs and comprehension

Use proper techniques to make a formal oral presentation

Use basic research techniques

Use a wide variety of references and resources (both electronic and printed) for the purpose of writing business documents

Determine when more information is needed and ask appropriate questions

### **Communication & Interactive Skills: Oral**

Differentiate between pronunciation and enunciation

Practice correct pronunciation and enunciation

Express opinions and discuss issues positively and tactfully

Select language appropriate to the situation



Select the appropriate language and mode to be used in disciplinary action

Express ideas effectively in individual & group situations adjusting language, nonverbal gestures to intended audience

Discuss differing vocabulary, speaking styles, and nonverbals used in the exchange of ideas in a formal/informal setting

Demonstrate an awareness and acceptance of international, regional, and multicultural speech

Identify regional and cultural differences in spoken communications

Practice face to face, over the phone, and one to group:

giving instructions and checking accuracy of comprehension;

requesting different types of information including confidential, complaint, & detailed;

and

refusing

Use proper techniques to make a formal oral presentation

Answer questions in formal and informal situations

Use appropriate techniques to organize impromptu speeches

Deliver impromptu and planned speeches with confidence

Demonstrate ability to advocate for a specific cause

Present findings of capstone projects in a formal presentation using appropriate graphics, media, and support materials

### **Communication & Interactive Skills: Non-Verbal**

Give examples of how nonverbal messages have different meanings in various cultures

Demonstrate an understanding of and respect for diverse international manners and etiquette

Describe differences between male and female nonverbal communication

Include nonverbal cues in message interpretation

Assess and respond to a speaker's nonverbal messages

Discuss the value of silence in communication as a nonverbal cue

Discuss the use of touching in communicating

Discuss the legal implications of using touch in the workplace

Utilize nonverbal cues to display courteous attention to multiple speakers within a group

Use seating position, and personal proximity to communicate (i.e. formality/informality, situational mode - friendly, adversarial)

Interpret messages of furniture arrangement and office decoration

In a meeting setting, describe the nonverbal interpretations of seating arrangements

Discuss the use of clothing, color, posture, temperature, and lighting as communicators

Use eye contact and positioning to display specific messages

Discuss cultural differences regarding eye contact

Control facial expressions to create consistent messages

Discuss the use of chronemics/ time (duration, activity, punctuality) as a communication tool.

Use non-verbal assertiveness to overcome feelings of intimidation

### **Communication & Interactive Skills: Listening**

Follow oral instructions

Listen for intended meaning

Listen discriminately to separate fact from opinion

Identify and overcome major barriers to listening

Identify relevant information in oral messages

Listen objectively and record major points of a speaker's message

Listen attentively for the purpose of taking accurate notes or completing forms

Synthesize information from multiple speakers in a group and respond in an effective manner

Evaluate media and oral presentations analytically and critically

Extract information and improve understanding through active listening

Use active listening techniques

Utilize attentive listening to demonstrate courtesy and respect for the speaker

Demonstrate command of interactive listening techniques

### **Communication & Interactive Skills: Writing**

Discuss the importance of correct spelling, grammar, word usage, mechanics, and legible writing

Write logical, coherent phrases, sentences, and paragraphs incorporating correct spelling, grammar, and punctuation (avoids clichés and fictitious grammar)

Use acceptable standards for grammar, mechanics, and word usage

Use business vocabulary appropriately

Demonstrate a sensitivity to language bias (e.g., sexist, gender, race, religious, physically challenged, inappropriate personal judgement)

Distinguish between paraphrasing, documentation, and plagiarism

Use proper documentation procedures to avoid plagiarism

Outline to facilitate logical and understandable written documents

Apply a variety of specific proofreading techniques to identify and correct errors

Proofread documents to ensure correct grammar, spelling, and punctuation

Proofread business documents to ensure that they are clear, correct, concise, complete, consistent, and tactful

Edit and revise written work

Take simple notes

Use note taking skills incorporating critical listening and reading techniques

Express ideas clearly in writing, adjusting language or terminology to audience level

Write appropriate messages for specific audiences

Compose messages that promote-positive human behavior

Use empathy in specialized written messages  
Use the direct or indirect approach appropriately in correspondence  
Write business communications that are sensitive to multicultural situations

Compose simple requests for information, reports, and summaries  
Write messages which address specific needed improvements

Create formal and informal reports using suitable format supported by appropriate graphic aids  
Prepare industry-specific technical reports which incorporate graphic aids

Write personal notes to business colleagues in special circumstances (e.g., congratulations, sympathy, appreciation)

Analyze and respond in writing to routine business problems both individually and collaboratively  
Compose and produce a variety of business related documents including letters, memorandums, proposals, presentations, summaries, reports, opinion papers, newspaper articles, press releases, employment recruitment ads, and correspondence to client, suppliers, and employees using correct style, format, and content  
Write business communications that reflect international differences and address current practice and protocol

## **Communication & Interactive Skills: Reading**

Read and follow simple directions

Distinguish between literal and inferential statements  
Distinguish between fact and opinion in written materials  
Utilize highlighting as a reading comprehension tool

Expand vocabulary to include commonly used business terms  
Use contextual clues to recognize word meaning  
Explain career-specific terminology

Read trade publications, local & national newspapers, current business related best sellers  
Read textbooks for information

Apply reading skills to gather information from casual print media  
Select appropriate reading method for a particular situation (e.g., skimming, scanning, speed reading, and in-depth reading)

Retain and interpret information gained through reading  
Interpret information from manuals, computer printouts, and electronic sources  
Express reading comprehension through restating or summarizing  
Analyze and synthesize from print and electronic sources for group discussions and team building activities

Interpret business correspondence, professional articles, and supporting graphic materials  
Determine when printed media may have been used out of context to distort reality

Identify printed propaganda

Discuss the intent of printed propaganda and its impact on decision making

### **Communication & Interactive Skills: Client**

Discuss the concept of a comprehensive customer service philosophy

Differentiate between a "product-focused" enterprise and a "customer-focused" enterprise

Differentiate between internal and external customers

Discuss the use of customer profiles

Discuss the importance of effective customer relations

Demonstrate how one might take personal responsibility for customer satisfaction adopting an entrepreneurial spirit

Employ appropriate strategies for dealing with dissatisfied customers on the telephone, face-to-face, and in writing

Assess and project the long-term monetary impact of a lost customer

List reasons why customers leave the company

Analyze situations in which technology can positively and negatively impact on customer service

Discuss the importance of the telephone as a customer service tool

Project a positive first impression on the telephone

Use proper telephone techniques and etiquette

Use appropriate telephone techniques to gather and record information

Use the telephone to gather personal and consumer information

Record complete and accurate telephone messages

Evaluate and select messages which may be addressed best by electronic media

Apply the rules of electronic messaging etiquette

## **Communication & Interactive Skills: Interaction**

Explain the value of interpersonal communications in personal/social relationships  
Explain the value and impact of interpersonal relationships in the business environment

Explain the importance of respect for the feelings and beliefs of others  
Explain the importance of tolerance and flexibility in interpersonal and group situations  
Demonstrate respect for differences of others  
Respect the rights and feelings of others  
Exhibit self control  
Describe own impact on others

Explain the purpose of authority  
Explain the importance of following chains of command  
Demonstrate proper respect for authority  
Work cooperatively with one's peers and authority figures

Describe how honesty and integrity affect relationships with others  
State ways in which honesty and integrity of co-workers affect work performance  
Model the concepts of honesty and dependability  
Foster positive working relationships

Practice appropriate interpersonal skills for working with and for others  
Respond appropriately to situations.  
Role-play appropriate and inappropriate employer and employee interactions in workplace situations

Discuss the importance of being able to work productively with people who are different from oneself  
Recognize personal biases and stereotyping

Describe perspectives which support respect for individual diversity  
Develop a sensitivity for and awareness of cultural diversity  
Discuss the types of discrimination and their impact on interpersonal relationships  
Define terms, such as ethnocentrism, stereotyping, and cultural bias  
Describe stereotypes, biases, and discriminatory behaviors in a business environment  
Discuss the negative impact of different types of discrimination  
Address cultural conflicts and identify appropriate solutions

Describe different cultural behaviors and expectations regarding work and relationships  
Compare the social roles of various subpopulations (e.g., women and minorities) in different countries

Interact effectively with people from differing international, cultural, ethnic, and racial backgrounds  
Demonstrate an understanding of and respect for diverse international manners and etiquette  
Describe ways in which work can help overcome social and economic differences

### **SKILL AREA TASK**

Select a Decade (I.e. 20s, 30s, 40s, 50s) Describe the Environment, Significant Events, Activities, Ideas, Concerns, and Values That Represent That Time Period. Project Perspectives Relating to Current Workplace Practices and Technology

Formulate strategies for working effectively with co-workers of varying age groups  
Respect and adapt to the positive and productive opinions of the establishment and mature workers in the business environment

Explain the basic principles of group dynamics  
Describe how the workplace environment influences behavior  
Explain how individual behavior influences the actions of co-workers  
Provide examples of how behavior can influence the feelings and actions of others

Understand interactive relationships required for effective teamwork  
Demonstrate effective group membership skills  
Demonstrate an interest in others' input and expertise  
Display a willingness to learn from others  
Negotiate with others to reach consensus  
Identify barriers to building consensus  
Participate as a team member

Apply the principles of group dynamics in structured activities  
Use principles of group dynamics to interact in the business environment  
Select appropriate communication techniques to avoid, minimize, or prevent conflicts

Model the process for conflict resolution  
Develop strategies for responding to and working with individuals under stress  
Practice the steps involved in handling conflict and stress  
Demonstrate the steps involved in resolving a conflict/stress situation  
Practice conflict resolution in academic, social, and business environments  
Demonstrate the ability to use mediation techniques

Practice techniques for giving & receiving constructive feedback  
Respond to feedback unemotionally & non-defensively

Define interpersonal communications and human relations skills  
Differentiate among passive, assertive, and aggressive behaviors  
Demonstrate appropriate responses to passive, assertive, and aggressive behaviors

# PROBLEM SOLVING & DECISION MAKING

Skills
Identifies improvement opportunities Anticipates and plans for problems Considers factual information, constraints, and root causes in generating solution alternatives and solving problems Seeks and utilizes relevant resources and examples Determines and communicates information to decision-maker(s)

## Problem Solving/Decision Making Extended Definitions

### SKILL AREA PROJECT

Select a Current Business Issue, Situation, or Event reported on by the News.  
Describe the problem(s) and/or issue(s), and stakeholders.  
Identify Alternative Courses of Action and Project Corresponding Impact.  
Development a Recommendation with Supporting Justification.  
Compare and Contrast Recommendation with the Business' Course of Action.

Apply the steps in the problem solving process

Define problem

Identify "root causes" to problems

Employ appropriate skills for gathering and retaining information

Describe the nature of problems faced by a business

Identify the problem and analyze possible solutions, given a business dilemma

Apply the problem-solving process to resolve a business problem

Identify potential problems facing a planned business

Identify the decision making process (recognizes problem exists, searches for underlying cause, defines problem, refines problem, classifies problem, and defines additional goals)

Identify the relationship between decision making and risk

Provide an example of how personal beliefs and attitudes affect decision making

Participate in brainstorming sessions to generate new ideas and solve problems.

Explain techniques for group decision making

Explain the nature of decision support systems

Implement financial and non-financial analysis techniques to make decisions

Use analytical skills to solve problems and make decisions

Define alternative courses of action that are based on logical assumptions which reflect factual information and consideration of constraints

Identify available solutions and their impact including evaluation of credibility of information, and location of information

Establish criteria for evaluating alternative responses to problems

Identify alternative responses to decision making situations

Project outcomes of alternatives

Develop contingency plans for solving identified problems

Set priorities

Evaluate options

Make fact-based decisions to resolve problems in a timely manner

Select/implement options/decisions including prediction of results of proposed action

Anticipate problems

Identify improvement opportunities

Develop innovative and creative solutions to problems

Make independent decisions when appropriate



## RATIONAL REASONING

Skills
Utilizes mathematical concepts to complete assignments Formats spreadsheets and databases to calculate and organize numerical information Researches and calculates numerical information needed in planning and operating a (junior achievement type) business

## **Rational Reasoning Extended Definitions**

Apply mathematical operations to solve problems

Use mathematical procedures to analyze and solve business problems for such areas as taxation; savings and investment; payroll records; cash management; financial statements; credit management; purchases; sales; inventory records; depreciation, cost recovery, depletion

Communicate understanding of problems through oral and written means

Determine appropriate mathematical processes to use for various problem situations and use formulas when appropriate

Select and use appropriate tools when solving problems (e.g., paper, pencil, manipulatives, calculators, computer numerical keypad, and spreadsheets)

Identify standard American units of measurement and show relationships (e.g., length, volume, weight, currency, and time)

Identify standard metric units of measurement and show relationships (length, volume, and weight)

Determine units of time and show relationships (e.g., days to months, elapsed time, or interest conversion periods)

Identify currency measurements for countries other than U.S.

Solve problems using various types of measurements

Estimate and convert American units of measurements (length, volume, and weight) to metric measurements and vice versa

Estimate and convert American dollar to currency of other countries and vice versa

Recognize, describe, and predict patterns of data

Analyze and interpret data using common statistical procedures.

Construct, read, and interpret tables, charts, and graphs

Make inferences about data from tables, charts, and graphs

Estimate and calculate measures of central tendency (mean, median, mode)

Use probability concepts to represent and solve problems involving uncertainty

Calculate frequency distributions

Calculate standard deviations

Calculate gross earnings (e.g., salary, hourly rate, commission, or production)

Calculate payroll withholdings, other deductions, and net earnings

Complete the employer's quarterly federal tax return which includes the calculations for employee and employer taxes

Calculate corporate income taxes

Compute individual income taxes

Calculate property tax, assessed value, or the tax rate when one of the three variables is unknown

Calculate estate and other taxes

Compute rates of return for various instruments and compare to make decisions

Calculate bank discount and proceeds on a discounted note

Compute compound interest and the resulting compound amount at the maturity date for savings and investments

Calculate the purchase price of a stock transaction

Calculate earnings per share  
Calculate price of a bond given a recent bond quotation  
Determine current yield on a bond

Calculate the amount, compound interest, and present value for a simple annuity  
Calculate the present value of an investment at compound interest

Determine and verify periodic payment required to finance a sinking fund and prepare a sinking fund schedule  
Determine total amount deposited and interest earned on a sinking fund

Calculate present value of a simple interest loan  
Determine periodic payment, interest, and total amount required to pay to amortize a loan (e.g., mortgage)  
Prepare a simplified amortization schedule

Determine finance/additional charges, periodic payment, total cost, and APR on an installment contract  
Determine the outstanding amount for installment purchases  
Compare cash price to installment price in order to make a purchase decision  
Calculate the effects of early payoff of an installment plan

Calculate fixed and variable costs, analyze data, and estimate the projected total income and total expenses for a given time period  
Reconcile and replenish petty cash fund and cash drawer

Calculate the total purchase price given the number of units and unit price  
Calculate the net business purchases with discounts and purchase returns and allowances

Determine the dollar amount of cost, markup, or sales price when one of the three variables is unknown  
Compute the percent of markup when based on the cost or when based on the selling price

Determine the dollar amount of markdown, selling price, or reduced price when one of the three variables is unknown  
Compute the percent of markdown given the regular selling price and the reduced price

Calculate the total sales and the sales tax for a sales transaction  
Compute net sales with sales/returns allowances and sales discount

Determine inventory valuation according to different plans (e.g., LIFO, FIFO, specific identification, and weighted average)  
Determine cost of goods sold for a given period using different inventory valuation methods  
Determine gross profit for a given period using different inventory valuation methods  
Calculate inventory turnover at cost and at retail for a given period

Calculate the depletion of natural resources  
Calculate book value

Calculate the annual and accumulated depreciation or cost recovery of plant assets (e.g., straight-line, declining balance, sum of digits, MACRS)  
Prepare depreciation and cost recovery schedules  
Calculate the amortization of intangible assets

Calculate the operating profit or loss, the absolute loss or break-even point  
Calculate net sales, cost of goods sold, gross profit, operating expenses, and net profit for the income statement  
Calculate total assets, liabilities, and owner's equity for the balance sheet  
Calculate the cash flow and determine cash sufficiency for a given period of time  
Calculate the change in equity for the statement of change of owner's equity or retained earnings statement

Apply generally accepted business ratios such as current ratio, debt ratio, and equity ratio to accounting data in order to make decisions

Calculate the distribution of profit/loss to the proprietor, partners, or stockholders

Explain relationships between mathematical processes

Estimate and then calculate answers to problems

Compare computed result with estimated result to determine the reasonableness of the solution

# CAREER EXPLORATION

Skills
Maintains a realistic profile of personal interests, strengths, and areas needing development Investigates occupational interests Develops a career plan Utilizes networks, interviews, and other employment strategies to secure employment Recognizes own performance strengths and weaknesses Understands employment procedures, rights and responsibilities

# CAREER EXPLORATION

Self Awareness

Careers

Career-Self Assessment

Career Plan

Career Development

Employment Strategy

## **Career Exploration Extended Definitions**

### **SKILL AREA PROJECT**

Prepare a Multimedia Resume/Presentation

#### **Career Exploration: Self Awareness**

List characteristics about yourself (without judgement)

Identify personal likes and dislikes

Identify individual talents and interests

Identify personal, physical, and mental characteristics (in terms of job qualifications)

Identify personal strengths and weaknesses

Demonstrate a realistic understanding of self

Explain the role that self-concept plays in one's personal and professional life

Enhance personal/professional self-image and esteem

Identify the changing roles of men and women in business and family

Determine how the expectations of others affect career goals

Discuss how the use of substances such as alcohol, tobacco, and other pharmaceuticals affects performance

Identify likes and dislikes of home and school responsibilities

Identify personal goals that may be satisfied through a combination of work, community, social, and family roles

Relate the importance of career, family, and leisure activities to social and economic well-being

Analyze personal leisure choices in relation to lifestyle and the attainment of career goals

Explain how decisions regarding education and work impact major life decisions

Illustrate how personal qualities transfer from school to the workplace

Analyze school/work evaluations to assess strengths, weaknesses, and areas for improvement

Discuss how health, motivation, and physical fitness enhance performance

Identify skills and knowledge required to upgrade and improve performance

Formulate and implement a plan to address identified weaknesses

Complete a battery of standardized interest and career identification tests

Evaluate the accuracy of the results of tests

Assess the validity and utility of interest surveys & assessments, personality assessments and other career identification tests/assessments.

#### **Career Exploration: Careers**

Identify and learn about careers of family members and/or friends

Describe and give examples of career clusters

List and describe various types of occupations in the community (e.g., banker, realtor, etc.)

Develop an awareness of occupational opportunities (e.g., speakers and field trips)

Research a variety of career clusters (e.g., field trips, speakers, case studies, shadowing, or community service)

Define skills and qualities needed for certain jobs and careers

Use a variety of research tools in the career exploration process (e.g., computer assisted programs, newspapers, books)

Design a questionnaire to be used for career exploration interview (e.g. educational requirements, starting salaries, career ladder opportunities)

Assess the value of work

Discuss social and economic factors that have resulted in changing career patterns for women and men

Discuss advantages and disadvantages of entering nontraditional occupations

Identify stereotypes, biases, and discriminatory behaviors that may impact opportunities for women and men in certain occupations

Specify techniques for eliminating gender bias and stereotyping

Identify community business people and learn about career opportunities

Identify the characteristics of business people and entrepreneurs.

Describe the characteristics of business executives and entrepreneurs.

Explain and evaluate the common characteristics of business executives and common characteristics of entrepreneurs.

Describe the skills and interest necessary for success in each functional business area

Compare and contrast different cultures and the value attached to characteristics

Determine attitudes needed for career success

List products from other countries and the occupations related to them

Illustrate the differences between a multicultural (heterogeneous) and single cultural (homogeneous) environment

Explain how educational and career opportunities relate to regional/global economies

Describe the culture of 1 particular country and its relationship to a potential career choice

Identify distinctive social and cultural factors affecting business activities (e.g., time, workday, workweek, schedules, and holidays)

Describe the different living and working conditions found in foreign regions

Describe how compensation and employee benefits differ in various cultures

Identify how differences in occupational health and safety standards impact the conduct of business internationally

Demonstrate how social and cultural factors influence employee evaluation, promotion, and international business career paths

Explore entrepreneurship opportunities in international trade

Describe the impact of the global economy on job availability

Research several occupational interests

Define job characteristics (i.e. outdoor/indoor, pace, task types with percentage of time allocated - paperwork, telephone work, people interaction, etc., routine/dynamic, reactive/progressive, etc.)

Select and use resources available for projecting career opportunities and trends



Research a specific career  
Identify resources for retraining and career transition

Develop pictorial and/or written document using career information  
Prepare documents related to career exploration using a variety of technological resources  
Prepare a career portfolio that includes career research materials and work samples

### **Career Exploration: Career/Self Assessment**

Describe the relationship of assessed interests, aptitudes, and abilities to academic and occupational skills  
Analyze how the skills and knowledge acquired in school relate to various occupations  
Describe the importance of effective study habits, test-taking skills, and learning skills  
Relate skills developed in academic and technical programs to career goals  
Determine how educational achievement impacts one's choice of a college major, further training, and/or entry into the job market

Identify considerations for making responsible educational and occupational choices  
Relate various levels of education to careers  
Relate the importance of education to meeting identified goals  
Apply career goals, skills, and interests to selection of high school courses

Complete systematic self, career, and job analyses  
Assess and analyze personal talents and interests as they may relate to a future career  
Compare personal skills and aptitudes with various career options  
Correlate personal characteristics and requirements of various career opportunities  
Assess and analyze strengths and weaknesses relative to a variety of career options

Identify one's own personal traits in common with business executives and entrepreneurs.  
Identify the costs and benefits of choosing to become a business executive and/or entrepreneur.

Relate career interests to opportunities in the global economy  
Assess personal work skills as they relate to obtaining employment in another country

Correlate personal, physical, and mental characteristics with various job tasks

### **Career Exploration: Career Plan**

Explain the importance of career planning

Design a career plan that includes self assessment, research, career alternatives, and high school course options  
Create and implement a career plan that includes the required steps to transition from high school to postsecondary education/training or the workplace  
Compare advantages and disadvantages of various secondary and postsecondary programs to the attainment of career goals

Experience paid/unpaid work opportunities in one or more career clusters (e.g., shadowing, mentoring, cooperative work experiences, or community service)  
Experience paid/unpaid work opportunities in a chosen career cluster (e.g., internships, apprenticeships, or worksite learning)

Participate in a shadowing or mentoring program with a positive, professional role model

Explore appropriate employment opportunities and further education

Identify sources of financial assistance

Complete the steps required to apply for financial assistance

Maintain journal of career-oriented experiences (e.g., speakers and field trips)

Identify examples of work to be included in a resume type portfolio

Create a personal vision for self ten years into the future

Develop strategies for reaching the personal vision

Identify obstacles that may interfere with obtaining career goals

Develop solutions and/or options to address obstacles

Establish personal short-term goals

Revise and update one's career plan

### **Career Exploration: Career Development**

Develop an action plan to transition from school to work

Describe how career development is a continuous process with a series of choices

Relate the necessity of lifelong learning to one's ability to achieve goals

Reassess and analyze individual talents and interests as they relate to changing career decisions

Reassess personal characteristics and relate to desired career options

Explain advantages of early career planning

Enhance identified strengths related to selected career options

Monitor progress and restructure the plan as needed to develop identified weaknesses

Reassess personal strengths and weaknesses in relationship to career development

Analyze sample employment performance evaluations to assess strengths, weaknesses, and areas for improvement

Explain the importance of professional and community involvement

Discuss the social and ethical standards of the workplace

Develop an awareness of workplace developments

Identify trends in the changing workplace

Discuss the need for flexible career planning

Identify career opportunities resulting from new and emerging technologies

Discuss appropriate oral and written steps in leaving a job (resignation, down-sizing, exit interview)

Demonstrate appropriate techniques for resigning from a position

Discuss expectations of an exit interview

Identify strategies for coping with loss of employment

Describe career pathways in career development (upward and cross mobile)

Develop strategies to accommodate impending changes in the workplace

Use the "grapevine" effectively

Discuss ethical political strategies to achieve goals and advance careers  
Analyze and respond to business case studies involving office politics and the advancement of careers

### **Career Exploration: Employment Strategy**

Identify recruiting sources of new employees  
Identify methods used to recruit and select employees  
Identify common selection tools and determine why they are used (e.g., interview, tests, reference checks)  
Describe legislation affecting the selection process and why it is important (e.g., affirmative action, right to privacy)

Analyze a job description and determine how it will be used in the recruiting process  
List and discuss qualities that employers expect in potential employees

Discuss alternative sources for job placement (e.g., career centers, employment agencies, professional recruiters)

Develop criteria for selecting prospective employers  
Research the job market and specific potential employers  
Maintain a job search database  
Conduct job search

Discuss the importance of an informal personal network in job search strategy  
Identify available resources inside and outside of the school useful for making professional contacts (e.g., career development centers, business schools, alumni, business leaders)  
Develop liaisons with community and professional organizations using strategies such as internships, volunteer work, and membership in organizations  
Participate in school, community, and/or volunteer activities

Identify a network of business people to assist in securing a job  
Develop a network of professionals  
Establish a work-related network through social contacts  
Use personal network in the job search situation  
Use established network of professionals to assist in the job search

Develop portfolio (e.g., resume, sample cover letter, awards, extracurricular activities, and community service)  
Complete a job application form  
Prepare resumes and cover letters  
Write a simple application letter and resume for simulated job opportunities  
Write a formal application letter, resume, and follow-up letter for job opportunities  
Prepare international documentation  
Compose effective business communication based on an understanding of the relevant environments and differences in tone, style, and format

Enhance portfolio through revisions (e.g., resume, sample cover letter, sample applications, career plan, examples of work and technical skills, awards, community service, and career information database)

Use portfolio in job search process

Demonstrate portfolio presentation skills  
Plan and present self presentations for different positions

Identify steps to prepare for an interview  
Model behavior that contributes to a successful interview  
Prepare a list of common mistakes made by interviewers & interviewees

Demonstrate appropriate interviewing techniques (e.g., portfolio presentation, questioning, dress, and etiquette)  
Display a positive attitude in personal and professional settings

Role-play interview situations for simulated job opportunities  
Respond to mock interview questions  
Participate in and analyze mock interviews, emphasizing critical times at the beginning and the end of an interview  
Participate in a variety of interview situations, both as an interviewer and as an interviewee

Differentiate between proper and improper business practices  
Apply principles of manners and etiquette in a variety of situations  
Relate cultural attitudes toward time, silence, space, and body/eye contact for successful international business relationships

Demonstrate proper etiquette for greeting and meeting people  
Practice simple introductions in a variety of situations  
Compare business protocol of various countries

Compare the use of business cards throughout the world  
Explain usage of names, titles, and ranks in different cultures and countries

Identify regional and cultural differences in spoken communications  
Demonstrate an awareness and acceptance of international, regional, and multicultural speech

Use proper telephone techniques and etiquette

Discuss the significance of nonverbal communications in the interviewing process  
State examples of non verbal communications affecting international business relationships and negotiations

Prepare list of questions to ask interviewer  
Ask questions with confidence to elicit general information  
Ask questions with confidence to elicit specific information

Discuss complications involved when speaking or interpreting a language incorrectly abroad  
Use words and phrases important to business people in a given language  
Explain modifications of conversation with a person who speaks English as a second language  
Identify the role of translators and interpreters in international business settings

Discuss and demonstrate the importance of appropriate dress in an interview situation  
Demonstrate proper grooming for the business environment  
Expand one's professional wardrobe

Demonstrate effective salary negotiation strategies  
Use strategies for accepting or rejecting an offer  
Discuss potential problems with signing employment contracts

Explain the importance of interview follow-up  
List tasks to be completed following interview

# LIFE SKILLS

Skills
Develops a spending plan to meet personal spending goals Applies for & obtains credit as needed Evaluates investments & invests assets Computes & files individual income taxes Locates legal resources & complies with legal processes & requirements for life events Develops an estate plan Lists the parties and processes required in the purchase of real property Cites employment procedures, rights, & responsibilities Complies with OSHA rules & regulations and environmental laws Comparison shops, evaluating advertisements, products, & services

# LIFE SKILLS

Financial Transactions  
Legal Transactions  
Consumer Transactions

## **Life Skills Extended Definitions**

### **Financial Transactions**

Identify personal values and goals

Determine the financial resources needed to satisfy personal values and goals for a given time period

Develop a plan to allocate financial resources to meet an individual's financial goals

Develop a spending plan to satisfy needs and goals for a given time period

Develop and use a record-keeping plan that accomplishes both short and long-term goals

Compare a personal spending plan with typical consumer spending for major categories

Describe how income and spending patterns change throughout the life cycle for the typical person and family

Identify various sources of personal spending money (e.g., gifts, allowances)

Identify ways in which individuals and families obtain financial resources

Identify factors that may influence income from employment (e.g., occupational choice, educational level, lifestyle)

Explain when and why borrowing is used for the purchase of goods or services

Describe the risks associated with borrowing money

Explain credit and why it is used

Define interest and explain why it is charged

Explain the role of credit in a market economy

Identify sources of credit and the types of credit they offer

Match appropriate forms of credit to a particular buying decision

Determine advantages and disadvantages of credit

Explain credit ratings and describe why they are important to consumers in our economic system

Compare and contrast the legal aspects of different forms of credit (e.g., credit cards, installment loans, mortgages)

Compare and contrast the legal aspects of different sources of credit (e.g., pawnshops, revolving charge accounts, banks, credit bureaus)

Calculate the true cost of credit for various credit uses (e.g., continuously making minimum credit card payments, total mortgage interest)

Describe a secured transaction and explain the requirements for creating a valid security interest

Define the major types of collateral

Explain the nature of a letter of credit and the liabilities of the various parties to a letter of credit

Describe why and how people save

Describe the advantages and disadvantages of different saving and investing plans

Analyze the factors that affect the rate of return on a given savings or investment plan (e.g., risk, current interest rate, liquidity)

Explain why a savings & investing plan changes through the life cycle

Define various types of income derived from investments

Differentiate between interest, dividends, capital gains, and rent from property

Describe characteristics of investment portfolios



Discuss portfolio management and dollar cost averaging  
Describe how saving and investing influences economic growth (capital formation)

Define basic terms, such as currency and currency exchange  
List the currencies of various countries  
Calculate simple currency exchange transactions  
Explain how currency exchange rates affect companies  
Identify potential problems of dealing in foreign currencies  
Describe how economic conditions, balance of payment situations, and political issues affect currency values  
Distinguish between currencies (e.g., hard vs. soft, convertible vs. non-convertible)

Explain the importance and function of commercial paper  
Identify and explain the essential elements of a negotiable instrument  
Describe the different types of negotiable instruments and different types of endorsements  
Describe the legal effect of forgeries and material alterations  
Illustrate the importance of warranty liability and its relationship to endorsement liability

Explain the contractual relationship between the bank and its customers  
List the basic services provided by banks  
Identify services that financial institutions provide to customers  
Evaluate banks/financial institutions for personal fit  
Perform the steps involved in opening and using a checking account  
Reconcile a bank statement  
Describe stop-payment orders

Explain personal taxes and give examples of how they are used  
Identify the types of taxes that are major sources of revenue for government (e.g., income, wealth, and consumption taxes)  
Calculate personal tax liabilities for various types of taxes, such as property, income, sales, and FICA taxes

Identify risks in life and how to gain protection against the consequences of risks  
Explain why insurance needs change throughout the life cycle

Define insurance and differentiate between requirements for an insurable interest for property insurance with those needed for life insurance  
Describe types of personal insurance  
Compare and contrast the different types of life insurance, such as ordinary, limited payment, endowment, and term  
Compare and contrast the different types of property insurance, such as automobile, home owner's, and marine  
Explain some of the differences in health insurance coverage

## **Legal Transactions**

Explain the relationship between law and ethics  
Describe the philosophies and ethics involved in the design of the U.S. legal system  
Compare other countries' philosophies underlying their legal systems  
Identify the basic freedoms guaranteed by the Bill of Rights and describe several key Constitutional amendments beyond the Bill of Rights

Compare and contrast the national constitution with state, territory, and province constitutions

Explain a person's responsibility to obey the law

Explain the Constitution and describe the branches of government as presented in the constitution

Describe the roles, powers and limitations of the each branch of government as stated in the Constitution

Define statutory law, identify the purposes of statutory law, and describe how a bill becomes a statute

Explain the function of the court

Describe how courts make law and explain the role of precedent in the legal system

Describe the basic structure of the national and state, territory, province court system

Distinguish among the roles of the legal professionals, such as judges, lawyers, and paralegals

Distinguish between procedural law and substantive law

Define litigation and describe methods for resolving disputes other than litigation

Explain the advantages and disadvantages of arbitration, mediation, and conciliation

Distinguish between civil and criminal law

Define different types of business crimes, such as arson, forgery, and embezzlement

Define real property, personal property, and fixtures and explain why property distinctions are important

List different methods by which property is acquired

Define intellectual property and list types of intellectual property

Describe the kinds of rental relationships that landlords and tenants may create

Describe and discuss the various aspects of bankruptcy, such as Chapter 7—Liquidation, Chapter 11—Reorganization, and Chapter 13--Reorganization of Debts

Compare the differences between voluntary bankruptcy and involuntary bankruptcy cases

Identify and discuss alternatives to bankruptcy

Identify debts which are not extinguished by bankruptcy

Discuss the distribution of the estate on liquidation

Distinguish among liens, licenses, and easements and explain the differences

List the major estates in land and describe the major features of each

List and describe the forms of co-ownership of real property

Illustrate the method of transferring title (deeding) to real property

Define marriage and explain the rights and obligations are involved in marriage

Contrast the age requirements for marriage under the laws of different states and different national legal systems

Define testamentary capacity and testamentary intent

Identify the requirements necessary for a valid will

Distinguish between signing, attesting, and publishing a will

Explain how a will may be modified or revoked

Distinguish between the protection given to spouses and to children under the law of wills

Explain what happens to a decedent's estate when a person dies without a will

Identify the responsibilities of an executor or administrator in the settlement of an estate

Describe the probating and contesting of a will

Identify the key characteristics of trusts

Differentiate among the various types of trusts, such as charitable, private, spendthrift, revocable, and irrevocable trusts

Explain the advantages and disadvantages of establishing a trust

Demonstrate an understanding of the nature of a contractual relationship

List the elements required to create a contract

Explain how offer and acceptance can create contractual rights and duties

Explain a minor's right to avoid a contract and identify people who lack contractual capacity

List the ways a contract can be discharged

Differentiate among goods, service, and real property contracts

Distinguish between a sale of goods and other transactions relating to goods

Describe the Uniform Commercial Code (UCC) and explain how it regulates purchasing and selling transactions

List and explain the remedies of the seller when the buyer breaches the sales contract

List and explain the remedies of the buyer when the seller breaches the sales contract

Define the statute of limitations and describe when the time period of this statute usually begins and ends in a sales transaction

Define the concept of downsizing and why it occurs

Describe the common elements of a labor contract

Outline the procedures involved in the grievance process

Identify benefits available to employees

Explain the methods used to compensate employees (e.g., wage, salary, commission)

Define regulations and explain how administrative agencies create regulations

Define environmental law

Relate the historical development of environmental law

Describe the various federal statutes, such as the National Environmental Policy Act, the Clean Air Act, the Clean Water Act, and the Toxic Substance Control Act, that impact upon the environment

Describe the various state statutes that impact upon the environment

Describe the impact each household has on the environment

Explain the need for energy regulation and conservation

Describe alternative energy sources available

## **Consumer Transactions**

Explain the impact of marketing on personal life

Identify goods and services imported to or exported from a state, region, country

List items produced only in some countries

Demonstrate an awareness of major geographical features of countries of the world

Locate the major trade regions of the world  
Differentiate time zones throughout the world  
Recognize major cities of the world and identify the countries in which they are located

Explain how time zones around the world affect businesses  
Demonstrate an understanding of the relationship between international events and the daily conduct of business

Collect advertisements related to international business  
Discuss media used in different foreign markets

Comparison shop for purchases  
Identify alternative sources for purchases such as co-op, retail, discount, mail, and television  
Explain why there is variance in price for a given item bought from different suppliers  
Analyze the role that supply and demand play in determining the availability and price of goods and services

Collect information about products that meet a specific need or want  
Use published consumer resources to collect information for making buying decisions

Determine personal resources available and prioritize meeting a specific need or want  
Evaluate available buying options given personal financial resources  
Identify the steps in a rational decision-making process and how they are used in making a buying decision

Differentiate between rational and emotional buying motives  
Explain when it is appropriate to use a formal rational decision-making process as part of a buying decision

Discuss consumer protection legislation, such as the Federal Trade Commission Act, the Consumer Product Safety Act, and the Consumer Leasing Act

Explain the effect of a sale-on-consignment and a sale-on-approval

Identify international cultural differences in food, dress, and social behaviors  
Identify major holidays of various cultures and discuss how they are celebrated

Discuss gift giving practices in several cultures and give examples of appropriate and inappropriate gifts for persons in a given country  
Compare social entertainment activities among people in various parts of the world  
Relate cultural attitudes toward time, silence, space, and body/eye contact for successful international relationships  
List the practices appropriate to receive visitors from specific countries

# MANAGEMENT

Skills
Comprehends and communicates the organization's vision/goals/objectives Coordinates projects efficiently and effectively utilizing resources Acts as a facilitator Fosters a cooperative environment, motivates and encourages Builds and maintains cooperative relationships

## **Management Skills Extended Definitions**

Describe how the organization provides for accountability through authority and responsibility  
Discuss supervision as a process for reaching goals through the use of human resources, technology, and material resources

Explain the concept of staffing  
Explain the relationship between span of control and delegation  
Discuss the concept that power is a trust and a responsibility  
Explain the types of power and identify appropriate uses of each

Identify and apply the four functions of the management process (planning, organizing, directing, and controlling)

Develop realistic objectives and plans for achieving them  
Define clear expectations and performance standards  
Utilize joint problem-solving processes to resolve differences in expectations

Utilize resources efficiently & effectively  
Identify and differentiate social, organizational, and technological systems, and operate effectively within them  
Build and maintain productive working relationships  
Achieve agreements that may involve exchanging specific resources or resolving divergent interests.

Manage both the small and large aspects of a project  
Maintain control over activities and assure proper completion  
Provide directions for completing jobs/tasks  
Check & follow-up on tasks, processes, results, maintaining focus over a period of time

Discuss group dynamics and life cycle  
Predict problems, issues, and outcomes at various group stages  
Promote collaboration and teamwork  
Facilitate cooperative efforts with diverse groups

Seek to integrate own efforts with others  
Assume personal responsibility for team efforts  
Remain persistent even when faced with obstacles or resistance  
Maintain effectiveness in varying environments and with different tasks, responsibilities and people.  
Gain support and commitment from others to accept own ideas without reliance on authority or position.  
Participate in a coaching/mentoring situation

Discuss the importance of listening to subordinates  
Articulate both sides of an issue and respect the feelings of others  
Facilitate agreement and understanding, even in a conflict situation

Communicate information or arguments effectively, showing similarities in positions or goals in a manner that gains agreement or acceptable compromise of all parties involved  
Take specific steps to promote a friendly climate, good morale, and cooperation  
Create a climate that fosters personal investment and excellence

Orient new group members  
Assess knowledge and skills of people  
Distribute work according to knowledge and skills of an individual  
Assign tasks and allocate decision-making in accordance with skills, constraints, and resources  
Facilitate meetings to effectively utilize group resources and talents

Evaluate performance of an individual  
Construct and deliver objective and effective performance appraisals  
Use techniques to provide appropriate feedback  
Provide constructive feedback and praise  
Give credit and recognition to others for contributions  
Provide meaningful recognition to every group member making a contribution

Describe the uses for standardized managerial and interpersonal assessments  
Assess own managerial and interpersonal styles  
Discuss limitations of standardized assessments  
Evaluate accuracy of personal results

## SKILL AREA PROJECT

### Manage a Project to Completion as a Project Manager

#### Project Organization

Each group is comprised of group members and a Project Manager. The Project Manager is responsible for the organization and operation of the group, and the end product. Group members are responsible for maintaining their status as a member, and completing the project assigned. Project grade or evaluation are awarded to all group members.

#### Group Operations

Participants in each group operate under the doctrine of "employment at will". This implies that participants can quit, be fired (recommended by the Project Manager approved by the Instructor), and be hired by another group (recommended by the Project Manager approved by the Instructor). Participants without a group must complete the entire project and complete an assessment on the group dynamics and interactions of another group.

Responsibilities and authority are delegated by the Project Manager. The Project Manager can request time extensions, additional resources, and Instructor assistance. Where time extensions are requested and granted, the group may be involved in the next project in a different group and must accept the consequences of that request.

Upon completion of the project, the Project Manager completes assessments evaluating each group members' skills and effectiveness (see Business Services Skills Assessment for area reference). Group members complete an assessment of the Project Manager's skills and effectiveness. Project Managers may be required to provide member assessments during the project as well as at the end of the project.

The Instructor or Instructor's designate is the ultimate evaluator of the group's product(s). Instructors provide evaluations on strengths and weaknesses of the end product. (Optional: The Group or individual group members evaluate group's product(s). Compare evaluations with the Instructor.) To reflect the true nature of business projects, evaluation criteria should consist of compliance with the initial criteria of the assignment and strengths/weakness, consequences, and/or positive/negative aspects of the end product.

At distinct time intervals within the project timeline, discussions regarding management style, group dynamics, progress, and concerns, should occur between the Instructor and Project Managers.

At distinct time intervals within the project timeline, discussions concerning member responsibilities, communication, and group interaction should occur between the Instructor and group members.



# LEADERSHIP

Skills
Provides leadership, through creating a vision/goal Creates a climate that fosters personal investment and excellence; sharing information; and authority and responsibility to act, while providing recognition and rewards

## **Leadership Skills Extended Definitions**

Identify the need for leadership

Explain the nature of leadership in organizations

Describe leadership qualities (via speakers, theorists)

Explain leadership theories

Compare and contrast alternative leadership styles and the appropriate style for a given situation

Name and explain several practices of an entrepreneurial leader

Describe the advantages in a given activity/sport of working together as a team

Describe the characteristics of successful teams and give examples

Explain why motivation, leadership, and trust are important to a team

Explain why clear communication among members of the team is important

Describe the influence of corporate culture on employee motivation

Describe ways to motivate others

Communicate thoughts, feelings, and ideas to justify a position, encourage, persuade, convince, or otherwise motivate an individual or group.

Demonstrate effective leadership and motivation techniques in small group situations

Create a climate that fosters personal investment and excellence; sharing information; and authority and responsibility to act, while providing recognition and rewards.

Explain the importance of linking the goals of the individual to the goals of the organization

Assume a leadership role in school, community, and/or volunteer activities

Distinguish trends, predict impact of external and internal events and actions on system operations, diagnose deviations in the function of a system/organization, and initiate actions to correct

Identify and suggest modifications to existing systems to improve products or services and develop new or alternative systems.

# INFORMATION TECHNOLOGY

Skills
Utilizes word processors, spreadsheets, databases, desktop publishing softwares, email, networks and/or the internet to complete work
Maintains and operates computer, fax machine, copier, and other office machines
Evaluates & selects compatible computer hardware & software to meet needs
Cites legal violations & penalties pertaining to computer crimes

## Information Technology Extended Definitions

Develop touch keyboarding techniques

Develop touch keyboarding skills at acceptable speed and accuracy levels

Enter and manipulate numeric data using the touch method on a 10-key keypad

Compose, organize, and edit information using a keyboard and mouse

Use touch keyboarding techniques and word processing software to create, modify, store, retrieve, and print documents

Explain the purposes, functions, and common features of word processing software

Explain the meaning of common word processing terminology and functions on toolbars

Proofread and edit documents for accuracy and content, and for correct grammar, spelling, and punctuation utilizing software features such as spell check, thesaurus, grammar check

### SKILL AREA TASK

For Capstone Projects: Utilize Spreadsheets for Budgets and Financial Data  
Analyze Spreadsheet Data Utilizing Graphs, Charts, and Tables

Explain the purposes, functions, and common features of spreadsheet software

Explain the meaning of common spreadsheet terms

Use spreadsheet software to design, create, manipulate, store, retrieve, update, add, search, sort, print, chart, and delete data

Design and enter formulas that permit users to ask "what if" questions to analyze spreadsheet data

### SKILL AREA TASK

For Capstone Projects: Design a Database for inventory, purchasing, and control related reports.

Explain the purposes, functions, and common features of database software

Explain the meaning of common database terminology

Explain the nature and interrelationships of bytes, fields, records, files, and databases

Use database software to store, query, retrieve, and sort data, and export to spreadsheets & word processors

Use database software to plan, create, update, add, and delete records

Use database application development tools to create information systems to solve organization problems.

Describe search strategies and use them to solve common information problems

Explain the purposes, functions, and common features of desktop publishing software

Explain the meaning of common desktop publishing terms

Identify and apply principles and techniques of publication design

## SKILL AREA TASK

For Capstone Project: Design product advertisements for print media (local newspapers, magazines, trade publications), the internet, and bulletin boards.

Use desktop publishing software to design, create, import data/graphics/scanned images, format, and produce a variety of publications

Explain the meaning of common presentation and multimedia software terminology

Use presentation and multimedia software to design, create, import data/graphics/scanned images/sound/video, edit, format, sequence, and produce a variety of presentations

Identify the types of application software and explain their purpose or use

Select application software types appropriate for specific tasks

Use reference materials, such as on-line help, vendor bulletin boards, tutorials, and manuals, available for application software

Install, upgrade, and customize application software

Diagnose and solve application software problems

Import and export text, data, and images between software programs

Describe different file types in relation to application programs (e.g. word processing, spreadsheet, data base, graphics files)

Import, export, and merge data stored in different formats

Identify and explain the various types and sources of subject-specific software such as accounting software, financial software, production software, human resources management software, record management software, and marketing software

Identify and explain various types of on-line services

Access, navigate, and use on-line services

Send and receive email messages, voice messages, and faxes

Discuss global and economic issues and implications of the Internet

Discuss security issues pertaining to the Internet

Describe work and personal life activities affected by the Internet

Project societal changes in activities, behaviors, attitudes, and expectations caused by the Internet

List types of access to the Internet

Describe factors which affect transmission

Discuss the functions of browsers, web sites, and Internet programming languages

Retrieve and transfer files via the Internet

Design a web page

Describe how information systems have transformed business processes and relationships

Describe how information systems have changed the manner in which training is offered and implemented

Explain how information systems have contributed to worker productivity

Explain the purpose, operation, and care of hardware components

Identify hardware components appropriate for specific tasks

Apply procedures used to restart and recover from situations such as system failure and viral infection

Describe various types of operating systems, environments, and utilities  
Compare and contrast the functions and features of different operating systems, environments and utilities  
Select operating systems, environments, and utilities appropriate to specific hardware and software.

Identify the types of communications hardware and explain their functions and use  
Select communications hardware appropriate for specific tasks  
Evaluate communications software products in terms of their features  
Select communications software appropriate for specific hardware  
Communicate between varying computer platforms

Define a Local Area Network (LAN)  
Discuss the differences between a Local Area Network and Wide Area Network  
Describe types of client/server architecture  
Explain network topologies and compare their strengths and weaknesses

Explain the process for a long distance telephone call connection  
Identify, evaluate, and select telephone systems for various organizational needs

Use project management tools to manage information systems development projects

Explain types of violations of Federal, State and County laws pertaining to computer crime, fraud, and abuse  
Discuss penalties which may be incurred by the person and company involved in committing computer crimes

Determine whether a particular computer program would be protected by labeling it a trade secret  
Determine when a computer program can be protected by a patent  
Determine when a computer program can be protected by a copyright  
Identify the circumstances under which the copyright of a computer program has been violated

# BUSINESS SERVICES SKILL STANDARDS

Information & Computer Technology

## BUSINESS SERVICES CONCENTRATION

Information & Computer Technology

## BUSINESS SERVICES CORE

Communication & Interaction  
Employability Skills

Supervisory/  
Management  
Skills

General  
Business

## CENTRAL CORE

SCANS  
HCPS

Common Skill  
Standards

Life Skills

Business Thinking & Problem Solving

Rational Reasoning

Career Exploration

OPTIONS: Specific Business Areas  
i.e. retailing, small business

Support Services

Operations

# GENERAL BUSINESS

Skills
Develops a viable business plan Conducts marketing research and analyses Develops a marketing plan Develops a financial plan including financial & pro-forma operating statements Devises organizational goals and strategies Develops a human resources plan Identifies business locations, facilities, and equipment Manages the start-up and operation of a business entity Designs marketing & production activities Designs and maintains accounting system Acquires and manages human resources Manages organizational activities



# GENERAL BUSINESS

Business Planning

Business Operations: Structure

Business Operations: Products/Services

Business Operations: People

Business Operations: Control

External Environment: Economic/Political

External Environment: Social/Cultural

## **General Business Skills Extended Definitions**

### **Business Planning**

Recognize opportunities from other people's wants and perceived needs.

Discuss how a former trend led to an opportunity in the global marketplace

Describe opportunities that led to the development of successful business endeavors.

Describe a business opportunity in a local area and explain the next steps in establishing a business oriented toward that opportunity

Describe potential business opportunities in relation to personal preferences, financial worthiness and perceived risk

Define opportunity costs and give examples

Explain the importance of opportunity costs when making a decision

Analyze a decision in terms of marginal costs and marginal benefits

Determine the differences between marginal cost and sunk costs

Compute the difference between total revenue and expenses

Determine if there is a business profit or loss in a specific business situation

Identify ways businesses compete with one another (e.g., quality, service, status, price)

Analyze business goals from various businesses in terms of future trends

Describe the importance of planning

Describe why businesses must plan

Develop a plan for a specific event

Define long-term and short-term planning

Select a specific event and identify long-term and short-term planning activities

Describe the impact of taxation, labor unions, and the local political environment on business planning

Identify the major components of a business plan

Describe the use of a business plan

Identify the information to be included in each of the components of a business plan

Identify sources of information to be included in the plan

Identify sources of technical assistance to be used in preparing a business plan

Determine what is needed (e.g., materials, labor, etc.) to start a given business

Determine the costs of what is needed to start the given business

Identify on-going operational expenses

List common sources for borrowing money for a business

Explain the advantages and disadvantages of the most common sources of borrowing

Define the differences between debt and equity

Identify the major sources of funding for a business

Describe the tradeoffs between debt and equity financing

Discuss types of funding within each source (e.g., mortgage, short-term, long-term, credit lines)

Define a corporation and explain how it differs from a sole proprietorship and a partnership

Define and give examples of a franchise

Identify and describe special types of business ownership (e.g., sole proprietorship, Type S and cooperatives)

Describe the pros and cons of owning a franchise  
Describe the relationship between franchising and other forms of business organization  
Chart five forms of business organization illustrating an advantage and disadvantage of each  
Given facts about a possible new business, indicate the form of business organization that could be utilized

Define the role of strategic planning in a business  
Identify factors involved with a strategic plan  
Identify tools used in project planning (e.g., PERT, GANTT)

Based on a business opportunity, develop a vision for a specific business  
Develop the strategies for reaching the vision for a specific business

Distinguish between short- and long-term plans  
Develop short- and long-term strategic plans

Explain the role of operations planning in strategic planning  
Explain why marketing planning is essential for organization success  
Describe how a sales forecast can be a short- or long-term plan  
Explain how and why the sales forecast may be adjusted due to controllable and uncontrollable factors

Describe the process involved in developing a budget

## **Business Operations - Structure**

Explain the importance of organizing for the business  
Explain how the organizing function relates to using various resources to accomplish strategic goals

Compare and contrast the alternative organizational structures (e.g., organic, matrix, bureaucratic)  
Differentiate between tall and flat organizational structures  
Describe line vs. staff departments and the authority relationship between them  
Describe how the organization provides for accountability through authority and responsibility  
Discuss the interrelationships of a variety of organizational models (e.g., line, line and staff, functional)  
Describe the evolution of organizational structure as a company changes due to internal and external forces (e.g., size, complexity, profitability)

Compare and contrast alternative divisional and departmental structures (e.g., organic, matrix, bureaucratic)

Explain the advantages and disadvantages of centralization and decentralization  
State the advantages and disadvantages of the team concept to the organization  
Analyze organizational charts and determine how they need to be modified

Describe the differences between an employer and an employee.  
Identify the levels of management  
Differentiate between a manager, a leader, and an entrepreneur.  
Analyze the trade-offs between the roles of a manager, an entrepreneur, and a line employee.  
Discuss the role of a manager and a leader for each level of management

Analyze essential job duties  
Perform external and internal salary and compensation analysis.  
Create a job description with an appropriate salary range and compensation package.

## **Business Operations - Products/Services**

Identify components of marketing (i.e., product, place, price, promotion, people).

Identify the steps in the marketing research process

Explain the purposes for conducting marketing research

Differentiate between primary and secondary sources of data

Determine the wants of specific consumers.

Differentiate between rational and emotional buying motives

Determine potential buyers of specific products at various price levels.

Develop strategies to influence rational and emotional buying motives

Describe how new product/services are conceived, developed, and test marketed

Classify products in industrial or consumer categories (e.g., convenience, shopping, specialty, raw materials, component parts, installations)

Differentiate between brand name and generic products

List the steps of the product life cycle and identify in which stage a product is located

Explain the importance of having a technological edge over competition (e.g., faster to market with new products)

Identify new product/service opportunities

Explain why the characteristics of a given product or service have a competitive edge

Determine extended product features that give a product the competitive edge

Design/select products to meet customer wants.

Design a new product to meet unfilled consumer wants.

Identify methods used to design or redesign products, and tools that assist in the process [e.g., computer assisted design (CAD)]

Identify ethical considerations relating to product development (e.g., pilfering ideas, industrial espionage)

Explain why a marketing plan is essential for the success of a product

Understand components of a marketing plan.

Identify the steps involved in the development of a marketing plan

Explain how the marketing plan encompasses all elements within marketing

Compare and contrast marketing strategies for products, services, ideas, and persons

Contrast a domestic and international marketing plan for a given product/service

Differentiate between strategic and short-term tactical planning

Identify current technological advances affecting marketing strategy

Differentiate between the consumer market and non-consumer market (e.g., government, industry, organizations )

Define and give examples of market segmentation.

Describe various methods of market segmentation (e.g., demographics, psychographic, benefits, product usage)

Explain why market segmentation is important to the achievement of market goals

Define and give examples of target markets for specific products.

Identify a target market for a given product or service

Define and give examples of the concept of market share.

Discuss the impact of competition on keeping/increasing market share

Discuss how networking can help maintain/increase market share  
Identify networking opportunities

Define the nature of a product mix in a particular company  
Determine new ways of marketing products using emerging technologies (e.g., Internet, television shopping)  
Demonstrate the ability to use the latest technology in marketing activities  
Identify product mix decisions that must be made in order to market the product or service  
Explain the advantages and disadvantages of product line diversification (e.g., extending product lines and adding new ones)  
Explain the need for comprehensive marketing of the extended product such as warranty, service contract, etc.  
Analyze ethical and social responsibility issues related to marketing

Name the common elements (required and non-required) on a typical product package  
Explain the various functions of packaging and why each is important (e.g., protection, promotion)  
Identify the qualities of an effective brand name  
State the effects of increased global trade on packaging (e.g., description in various languages, durability)

Determine the resources needed to produce a given product  
Establish quality control procedures  
Identify factors considered in scheduling production and tools that assist in the process [e.g., computer assisted management (CAM), Robotics]

Compare and contrast the production of parts internally vs. procurement from external sources  
Describe the importance of maintaining close working relationships with external suppliers  
Identify the factors considered when selecting suppliers (e.g., quality, price, reliable delivery)  
Identify sources for raw materials and parts, both domestic and international

Articulate purchasing decisions based on current sales data  
Forecast purchase decisions based on sales data

Define what is meant by the "cost" of a good or service  
Describe the difference between fixed costs and variable costs  
Determine the costs of producing a given product

Explain the marketing strategies used to reach a given target market  
Differentiate between direct and non-direct competition and how each affects marketing strategy  
Analyze the competition for a specific product or service and determine how its strengths and weaknesses will lead to identification of opportunities

Define what is meant by the "price" of a good or service  
Identify the factors that will influence a product's price (e.g., cost, quality, competition, brand loyalty)  
Discuss factors that affect pricing.  
Explain the relationship between price and perceived quality

Describe the role of variable costs on pricing  
Describe the interrelationship between cost and price  
Explain the use of break-even analysis to determine price

Identify the various objectives of pricing (e.g., revenue maximization, profit maximization)

Identify various pricing policies (e.g., line, loss leader, psychological) and the situations in which each is applicable

Describe the alternative new-product pricing strategies of skimming and penetration, and explain when each is applicable

Describe how economies of scale attained through mass production affect pricing strategy

Identify ethical considerations relating to pricing (e.g., gouging, price fixing)

Calculate a product's price using a variety of methods (e.g., break-even, cost-plus)

Price a product in order to yield a profit.

Create promotional activities for a given product.

Identify the roles played by people involved in the purchase or use of the product (e.g., buyer, influencer, user)

Identify the various mediums available for advertising

Explain how changing technology affects advertising

Select/prepare appropriate advertising activities for a business.

Identify the factors that determine media selection

Explain how research can be used in the advertising process (e.g., pretesting, posttesting)

Describe the roles of copywriting, art direction, and production in the creative process

Identify the various forms of sales promotion available to distributors and consumers

Compare and contrast the alternative forms of sales promotion

Describe the factors used to determine the proportion of the promotional budget that should be allocated to sales promotion vs. advertising

Describe how marketers combine trade and consumer promotions in developing effective promotional programs

Choose appropriate sales promotion tools for a particular product or service

Identify the various forms of public relations activities used by marketers

Differentiate between public relations activities (which are largely controllable) and publicity (which is largely uncontrollable)

Critique public relations activities being used by marketers

Discuss ways in which companies can control (or at least minimize) unfavorable publicity

Select/prepare appropriate public relations activities for a business.

Explain the importance of personal selling in a company's operation

Demonstrate the steps involved in the selling process

Evaluate a variety of sales approaches (e.g., order-getting vs. order-taking)

Identify the various types of sales personnel (e.g., manufacturers, agents, missionary salespeople, retail salespeople)

Identify the problems associated with having too much or too little inventory

Apply methods used to count and inspect incoming inventory

Identify the basic forms of inventory carried by a manufacturing firm (e.g., materials and parts, work in process, finished goods)

Identify appropriate situations in which a Just-in Time inventory system can and should be used

Identify distribution channels for products & services.

Differentiate among the various channels of distribution and explain their importance to the marketing process (e.g., indirect vs. direct)

Explain the direct channel of distribution (producer to consumer) and when it is most appropriate to use

Determine various indirect channels of distribution (e.g., wholesaler, agent) and when each is most appropriate to use identify the most efficient means for distributing a product or service (e.g., agent, broker, retailer, wholesaler)

Explain the role of the various intermediaries in the channel of distribution (e.g., retailer, wholesaler, broker, agent, warehouse, stock handler)

Describe the concept of relationship marketing and the formation of customer communities

Identify the major components of a physical distribution system (e.g., type of transportation, storage)

Describe the importance of inventory control in the marketing process (e.g., maintain appropriate level, shrinkage)

Explain the importance of location of a business.

Identify why manufacturing locations are often close to the market served

Analyze appropriate location for a specific business.

Develop strategies for obtaining customer feedback

Discuss the importance of responding to customer concerns

Identify appropriate methods to respond to customer concerns

Establish strategies for maintaining customer loyalty

## **Business Operations - People**

Identify characteristics of a effective employee

Explain why friends and family may not be your best employees

Discuss the pros and cons of romantic relationships in the workplace

Describe policies and procedures used to manage compensation (e.g., company performance, benchmarking, profit sharing)

Describe the decisions faced by employers in selecting and paying for employee benefits

Explain the methods used to compensate employees (e.g., wage, salary, commission)

Calculate wages paid under various compensation methods

Identify benefits available for employee compensation

Describe the relative merits of internal promotion vs. hiring from outside

Explain the need for employee evaluation

Explain how employees are evaluated

Describe performance appraisal systems

Describe the procedures used in the evaluation process and why they are needed

Analyze performance system for extrinsic & intrinsic effects on employees (i.e. productivity, motivation, work quality, attitude, attendance)

Differentiate between performance appraisal forms, feedback, and system

Identify the consequences to employees of positive or negative performance appraisals

Describe the legal implications of using performance appraisals to terminate or demote employees

Explain why orientation and ongoing training are needed for successful employee performance

Describe the role of technology in the overall management process  
Use current technology in various facets of the managerial process

Describe the history of the labor movement and why unions were organized  
Describe the collective bargaining process including the use of mediators and arbitrators

Describe legal strategies used by labor and management to gain competitive advantage in contract negotiations (e.g., strikes, boycotts, layoffs, lockouts)  
Identify federal legislation which has affected organized labor and management and explain its effect  
Explain why the participation of workers in labor unions has changed  
Describe illegal strategies which have been used by labor and management to gain competitive advantage (e.g., wildcat strikes, secondary boycotts, preventing workers from forming unions)  
Describe the changing provisions of the labor contract and reasons for such changes  
Describe the process involved in forming and operating a labor union

Discuss the fact that all organizations are political entities because they distribute the power, resources, and rewards  
Define and discuss office politics  
Discuss positive & negative aspects of the "grapevine"

## **Business Operations - Control**

Define the control function and discuss why it is used in business  
Determine the controlling strategy to be used for a given business situation  
Describe the role of technology in the overall control process  
Identify current technology in various facets of the control function

Establish criteria to use for measuring the achievement of business goals.  
Analyze measurement procedures which monitor achievement of business goals  
Determine alternative actions when goals are not being met in a specific situation (e.g., changing goals, changing strategies)

Identify basic forecasting techniques and data sources  
Identify types of financial records  
Describe the type of data that is kept in each business record  
Identify the reasons for keeping business records  
Describe problems that might occur as a result of not keeping business records  
Describe the resulting consequences to a business of specific problems relating to keeping poor quality business records

Compare and contrast the various types of records  
Describe the interrelationships of various records  
Describe the effect that an inaccurate or missing record has on other records.

Identify essential records needed for the day-to-day operation of a planned business  
Define the relationship of recordkeeping and tax reporting  
Discuss reasons for keeping two sets of records: one for financial control, one for taxation compliance

Identify and complete basic records for a business (e.g., cash sales, credit card, checkbook, IOUs)  
Identify the advantages and disadvantages of keeping records manually or electronically



Describe why the analysis of financial statements is important for the business  
Analyze the data which are shown on financial statements and show how the data are interpreted for important decisions (e.g., income statement, balance sheet, cash flow statement, and statement of net worth)  
Examine a profit/loss statement to determine whether a business is profitable

## **External Environment: Economic/Political**

Define scarcity  
Define how a market economy resolves the problems of what, how, and for whom to produce  
Explain government's role in the U.S. economy  
Explain why government plays a role in the market economy  
Identify major functions of the public sector in a market economy  
Analyze reasons why a society's allocation of resources will be affected by its laws, public policy, and taxation  
Explain how government plays a role in determining what is and what is not provided in a market economy

Define the different types of market structures (e.g., competition and monopoly)  
Explain the effect of different market structures on market price  
Describe the relationship between private ownership and a market economy  
Describe monopoly and determine the role of government in preventing private monopolies and regulating public monopolies  
Discuss examples of U.S. laws and government regulations that are designed to maintain competition  
Identify examples of U.S. laws and government regulation that have had the effect of reducing competition  
Describe the impact of labor unions on the economy and social structure, and political framework of a State

Explain why institutions differ in response to particular situations as a result of pursuing their own self-interest (e.g., households with business, business with labor, households with government, labor with government)

Explain the determinants of supply and demand  
Explain how supply and demand markets interact to determine price  
Explain how market prices ration goods and services among those who want them  
Explain how market prices provide an incentive to produce goods and services  
Identify factors that affect the price of goods or services in markets that are not purely competitive  
Discuss ways that government can correct for the over- or underproduction or consumption of goods affected by externalities (e.g., tax policies, subsidies, and regulations)  
Explain why shortages, surpluses, and long-run allocation problems occur when price controls are enforced

Describe how economic analysis can help determine where market failures are important enough to justify corrective actions by government  
Describe the effect of government legislation on company productivity & profitability  
Discuss the effects of government expenditures, regulations, and tax policies on productivity  
Explain the government's role with respect to unemployment and its relationship to business owners

Identify four basic categories of earned income  
Explain the role of government taxation and its effect on consumers and producers

Explain how government plays a role in modifying the way in which a market economy distributes income

Define and give examples of progressive, regressive, and proportional taxes and their effect on specific income groups

Explain how government's redistribution of income through taxation, spending, and assistance programs affects the well being of people and business firms in an economy

Explain the direct and indirect roles of government as an institution

Provide examples of goods and services that are provided by the government

Define and give examples of public goods and services

Differentiate between monetary and fiscal policies and identify when it may be appropriate to use each

Analyze the effect of national debt on the level of economic activity

Describe the effect of transfer payments on the level of economic activity

Describe why the Federal Reserve System has limited ability to control the total amount of money in the U.S. economy

Explain how the U.S. economy affects small businesses

Describe how government can affect businesses

Explain how government regulations affect a business

Explain a rationale that could be given for government regulation of businesses

Give examples of government regulations that affect a small business

Compare the relative merits of having more vs. less government regulation of business

Identify the effects regulation has had on specific industries (e.g., long-distance telephone service)

Identify the regulating responsibilities held by various government agencies (e.g., FTC, USDA, CPSC)

Describe the role of the FTC in regulating business practices

Compare specific government regulations and their impact on doing business both domestically and internationally

Discuss how business, labor, and other constituents influence government regulations (e.g., through lobbying)

State the ways in which regulations differ among countries and their effects on business

Given a specific business situation, identify and evaluate the various ways in which government affects the business

Analyze the effect of government intervention on entrepreneurial incentives

Identify the role of government assistance in the growth and development of small business

Identify forms of financial export assistance programs offered by U.S. government agencies and investment corporations

Identify the ways in which a dysfunctional government restricts or discourages business

Give examples of tax policies which affect business

Explain how tax policy affects business

Give examples of licenses that a small business must obtain

Explain how licensure affects business

Determine the need for legal assistance

Determine needs for protecting ideas and inventions

Analyze the impact of governmental regulations on a planned business

Acquire the information necessary to comply with governmental regulations affecting a planned business.

## **External Environment: Social/Cultural**

Define culture

Develop an understanding of cultural differences

Describe influences of other cultures on American business

Compare and contrast business practices in different cultures

Analyze necessary modifications to American business practices to facilitate interaction in the global marketplace

Describe the concepts of export and import

Identify products that have been imported into the United States and their country of origin as well as products that have been exported by the United States and their receiving countries

Discuss the influence of domestic businesses on foreign markets

Describe the benefits/risks of international trade

Explain ways of investigating international trade opportunities

Explain the effect government regulations have on international trade

Discuss the impact on a business where the scope was increased from domestic to international

Discuss why the definition of "community" (e.g., local area, regional area, national, international) differs among business

Identify specific ways in which a company can help its community (e.g., jobs, taxes, contributions to special community projects)

Discuss the importance and/or benefits of a business giving back to the community

Identify ways a business can contribute to the community

Explain the pros and cons of various levels of community involvement by a business

Discuss the importance of Hawaiian cultural values in business planning and operation (i.e. sense of place, oneness with nature, respect for values of others)

Participate in a business-sponsored community service activity

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## APPENDIX C

The development of Hawai'i's Business Services Industry Skills involved four phases.

### Phase One - Committee Staff:

1. Researched business skill standards developed nationally and in other states.
2. Organized a committee which appropriately represented Hawai'i's business and education communities.

Business-industry representation: 56%

Geographic Representation: O'ahu and neighbor islands

Industry areas:

Accounting  
Advertising & Marketing  
Banking & Finance  
Human Resources/Personnel Services  
Importing/Exporting  
International Business  
Legal Services  
Public Relations  
Public Utilities  
Real Estate  
Small Business  
Telecommunications

Total gross revenue range: \$2.3 million to \$611 million

Number of employees range: 4 to 4400

Education representation: 44% including secondary and postsecondary education teachers and administrators.

### Phase Two - Committee Members:

1. Reviewed documents related to skill standards development.
2. Generated a list of SCANS (Secretary's Commission on Achieving Necessary Skills) competencies directly related to Hawai'i's business and industry needs.
3. Developed a composite list of essential competencies required in the general business workplace.
4. Compiled character profiles from these lists to define essential characteristics for entry-level, supervisory level, and technical/professional level applicants/employees.

**Phase Three - Committee Members:**

1. Integrated technical knowledge and skills with the character profiles for each level. Due to the broad spectrum of business-related positions, technical knowledge and skills were limited to general business and office operations. Positions identified as technical/professional which require licensing and/or specialized training, were determined to be best served at the post-secondary level.
2. Designed projects to depict essential occupational skills and tasks.

**Phase Four - Committee Staff:**

1. Validated skill areas and project competencies utilizing industry associations.
2. Generated final report for submission to the Hawai'i School to Work Opportunities System Executive Council.

**CONSTRUCTION INDUSTRY SKILLS**  
**FOR A**  
**HIGH SCHOOL**  
**BASIC**  
**CERTIFICATE OF MASTERY**

Hawaii Construction Industry Skill Standards Committee  
c/o Hawaii Department of Labor and Industrial Relations  
1997

## INTRODUCTION

The development of the *Construction Industry Skills for a High School Basic Certificate of Mastery* is a result of discussions and meetings with representatives of construction companies, labor, government agencies, construction industry organizations, and secondary and postsecondary educators. The committee proceeded with the intent to define the skills needed for entry level employment in the construction industry, entry into an apprenticeship program in the construction industry, or matriculation in a postsecondary education program preparing students for work in the construction industry. The committee proposes that these skills will translate into a basic certificate of mastery.

Although the National Skill Standards Board (NSSB) recommends that standards be developed for three levels of knowledge and skills ranging from broad to specific, the skills identified in this document mainly address the broad "core knowledge and skills" level. This is in accord with the NSSB's suggestion that the basic skill standards certificate (as opposed to a specialty certificate) encompass either the core alone or the core plus a concentration level).

Because the skills included lead to a high school certificate, they are limited in number and in the skill level realistically attainable in high school. The skills are also basic and broad to reflect competencies required to enter work or training in a multitude of occupations within the construction industry.

Sources used to generate the list of skills include those competencies identified by SCANS, the Oregon Department of Education, the Kailua High School Building and Construction Technology Academy, the Associated General Contractors of America, and the Workplace Readiness Assessment Consortium.

The skills are organized into three parts consistent with the framework suggested by the NSSB: 1) Academic Skills and Knowledge, 2) Technical Skills and Knowledge, and 3) Employability Skills and Knowledge. The basic premise underlying the creation of the skills is that all learning should be related to work. Therefore, the committee proposes that all of the skills identified should be related to the construction industry.

The skills are meant to be a guide for the development of a curriculum leading to a basic certificate of skills mastery and an assessment and report card of skills acquired by individual students. The committee expects that the incorporation of these skills into a student's high school education will benefit educators, students, and the employers by making education meaningful and by producing better prepared workers.

# ACADEMIC SKILLS AND KNOWLEDGE

*Students will be rated on the following competencies using the rating scale below:*

- 4 - Skilled*
- 3 - Moderately Skilled*
- 2 - Limited Skill*
- 1 - No Information or instruction provided*

*The following skills shall be applied to the construction industry.*

## **ENGLISH / COMMUNICATIONS**

Reads, interprets, and applies information from graphs and manuals  
Understands technical words  
Reads and understands instructions on the use of tools, equipment, and machinery  
Fills out a standard work form  
Listens to and follows instructions accurately  
Analyzes the effectiveness of communication between a supervisor and an employee  
Writes a report on work completed  
Summarizes a report  
Makes suggestions  
Distinguishes fact from opinion  
Presents a speech related to the industry

## **ECONOMICS**

Conducts research and reports on the economy of the industry  
Explains types of businesses and organizations including unions  
Applies supply and demand concepts  
Reports on the wages of workers in the construction industry

Interviews an entrepreneur

## **SOCIAL STUDIES / HISTORY**

Reports on the history of the construction industry in Hawaii  
Describes the construction industry in another country  
Describes local, state, and federal regulations affecting the industry  
Describes substance abuse policies in the workplace  
Demonstrates an understanding of cultural and interpersonal differences

## **MATHEMATICS**

Applies addition, subtraction, multiplication and division  
Applies decimal arithmetic  
Applies fractions  
Applies measurements including metric  
Demonstrates an understanding of graphs, charts, and tables  
Applies percentages and averages  
Calculates ratios and proportions  
Calculates area and volume

Solves algebraic problems using linear and non-linear equations

### **FAMILY AND CONSUMER ECONOMICS**

Describes the lifestyle of a family headed by a construction worker  
Understands fairness and equity in the family and workplace  
Reports on the cost of housing in Hawaii  
Describes the mortgage loan process  
Develops a household budget

### **SCIENCE**

Applies the scientific method  
Describes methods of treating hazardous materials  
Demonstrates knowledge and application of basic first aid  
Understands chemical properties and change  
Understands the laws of forces  
Understands electrical current  
Understands electrostatics

# **TECHNICAL SKILLS AND KNOWLEDGE**

*Students will be rated on the following competencies using the rating scale below:*

- 4 - Skilled*
- 3 - Moderately Skilled*
- 2 - Limited Skill*
- 1 - No Information or instruction provided*

*The following skills shall be applied to the construction industry.*

Identifies a problem in a construction industry workplace  
Generates alternatives for solving the problem  
Tests and evaluates the alternatives  
Applies the best solution  
Evaluates the results  
Correctly selects and accurately uses tools of the trade  
Maintains and troubleshoots equipment  
Demonstrates knowledge and application of safety procedures  
Reads and interprets floor plans and construction drawings  
Uses computer word-processing to type out a report  
Uses computer spreadsheet  
Understands the application and use of CAD and CNC-assisted machinery to the industry

Demonstrates knowledge of current and emerging technologies



# EMPLOYABILITY SKILLS AND KNOWLEDGE

*Students will be rated on the following competencies using the rating scale below:*

- 4 - Skilled*
- 3 - Moderately Skilled*
- 2 - Limited Skill*
- 1 - No Information or instruction provided*

*The following skills shall be applied to the construction industry.*

## **CAREER DEVELOPMENT**

Evaluates individual interests, aptitudes, and abilities in relation to career choices  
Identifies occupational choices  
Describes qualifications and preparation needed for career choices  
Describes the work and workplace of occupations chosen  
Describes how various industry sectors and occupations work together in the industry  
Demonstrates appropriate physical traits including physical condition, manual dexterity, eye-hand coordination, and spatial and form perception  
Examines career opportunities nationwide  
Develops a resume  
Explains the importance of lifelong learning

## **PERSONAL MANAGEMENT**

Demonstrates responsibility  
Demonstrates conscientiousness  
Takes initiative  
Demonstrates honesty  
Demonstrates fairness  
Demonstrates perseverance  
Flexible, adaptable

Manages time  
Manages material resources  
Manages personal appearance  
Manages personal resources  
Maintains personal health and hygiene  
Avoids absenteeism

## **INTERPERSONAL RELATIONS**

Works with all members of the team  
Listens attentively  
Respects others  
Exhibits concern for others' needs  
Helps others  
Shares expertise with others  
Suggests ways to improve situations  
Learns from others  
Tries to build consensus  
Deals with conflicts effectively  
Exercises leadership  
Follows directions  
Makes wise decisions  
Maintains a positive attitude  
Maintains a positive work ethic

## **PROBLEM SOLVING**

Uses logical thought processes  
Demonstrates critical thinking skills

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**ENVIRONMENTAL AND NATURAL RESOURCE  
SKILL STANDARDS**

DRAFT 11/20/97

BY

**SCHOOL-TO-WORK ENVIRONMENTAL AND NATURAL RESOURCE  
SKILL STANDARDS COMMITTEE**

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## **INTRODUCTION**

In September 1995, Hawaii was granted federal funding to implement the Hawaii School-to-Work Opportunities system (STW). The basic intent of the plan is to ensure that every student in the state has the necessary skills to succeed in the twenty-first century.

Under the grant, the State Department of Labor and Industrial Relations is charged with overseeing the development of industry skill standards for five economic/employment segments identified as high skill, high wage growth industries for Hawaii and the Pacific Region in the next century.

- Business Services
- Construction, Repair and Maintenance
- Environmental Technology/Agriculture
- Health Care Services
- Hospitality and Tourism

### **What are Skill Standards?**

Development of skill standards is a collaborative effort by the industry and education sectors to:

- Communicate the requirements of the modern workplace.
- Bring school work to "life" when students see why they should know something and how they will use it in the workplace.
- Promote high performance workplace practices to strengthen our state's global competitiveness.
- Facilitate lifelong learning to raise workforce skills, which increase worker security and mobility with the labor market.
- Improve the quality and accountability of education and training programs to better prepare people for work.

Within this context, skill standards serve as a common language that focuses on the knowledge and skills individuals must learn rather than the how, when, and where of the learning process.

Hawaii uses the Goals 2000 definition of a Skill Standard: a standard that specifies the level of knowledge and competence required to successfully perform work-related functions within an occupational cluster.

The five Hawaii committees have identified the industry skills and extended definitions. The skills can graduate into standards when the performance criteria are developed by local partnerships at the lead sites.

In each industry area, the skill standards developed will culminate in a portable skill certificate certifying mastery of skills that are at least as challenging as voluntary skill standards ultimately endorsed by the National Skill Standards Board (NSSB). The Goals 2000 legislation established the NSSB to encourage the creation and adoption of a national voluntary system of skill standards.

NSSB recommends that standards be developed for three levels of knowledge and skills ranging from broad to specific:

- Core
- Concentration
- Specialties

### **Framework for Skill Standards for the Environmental Technology Industry**

There are 378 Environmental Technology industry skills in five subindustries, which are: Pollution Characterization & Remediation, Environmental Planning, Natural Resources: Agriculture, Natural Resources: Marine, and Natural Resources: Forestry. To help describe the progression of skill levels toward industry occupations, these industry skill standards are displayed in a four-level concentric circle on page 3.

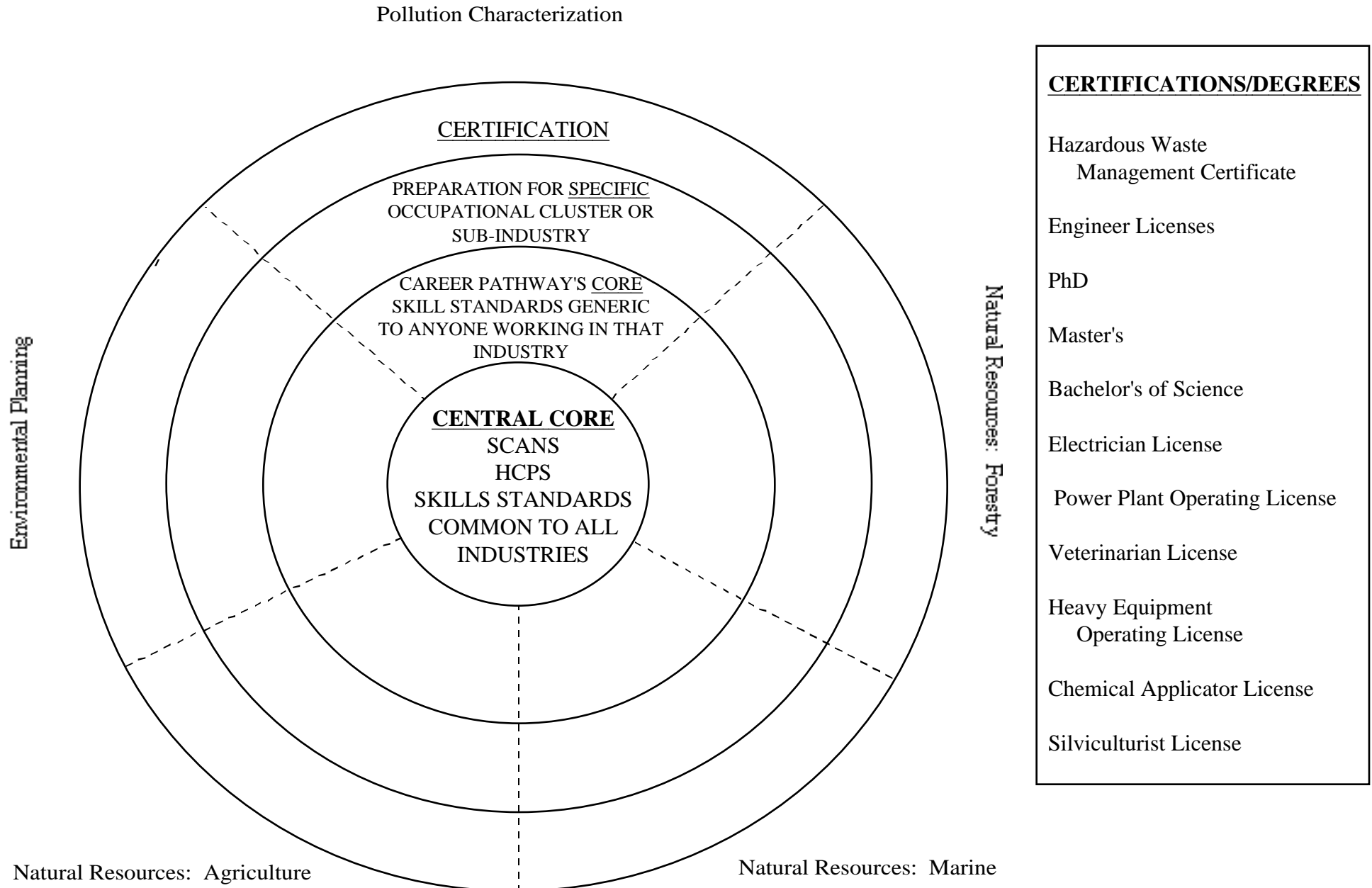
The central core of the framework includes the Hawaii Content and Performance Standards, SCANS (Appendix A), and the six additional skills which are common to all five industries (Appendix B). High school students need to graduate with these skills.

The second ring is the career pathway core. (This ring corresponds to NSSB's "core.") The common core for anyone in the Environmental Technology industry covers industry understanding, employability skills, communication skills, foreign language, computer and telecom skills, sales and marketing, entrepreneurship, and human resources.

The third ring is preparation for a specific occupational cluster or subindustry (those areas named outside of the rings). This preparation can start in high school, college, on the job, or in a training program. In this ring are the Laborer, Technician, and Professional skills, covering health/safety, environmental science, math, general science, industry technology, management, and production. (This ring corresponds to NSSB's "concentration.")

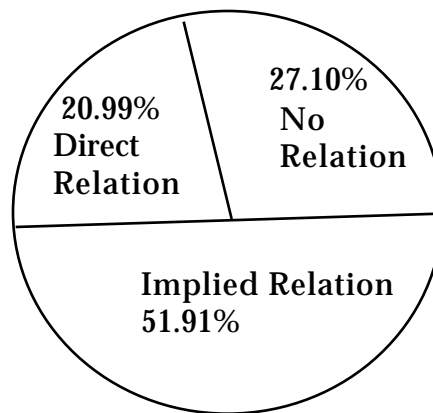
The outer shell lists the certifications/degrees required for occupations in the area of emphasis. (This ring corresponds to NSSB's "specialties.")

# ENVIRONMENTAL TECHNOLOGY INDUSTRY SKILL STANDARDS FRAMEWORK



### Skill Standards Relationship with Hawaii State Performance Standards

As a component of the definition for skill standard, the level of agreement between the skills and the *Hawaii Content and Performance Standards* is important to examine as it impacts on the issue of certification. Educators were asked to measure the degree of relationship between each skill cluster and the existing state performance standards. They were asked if there was no relationship, if there was an implied relationship, or if there was a direct relationship between the skill clusters and the performance standards. A greater percentage of skill clusters directly related to the state performance standards provides a greater degree of consensus toward skill standards and possible certification.



#### Results:

An implied relationship amounted to 52% of the teachers surveyed and represents the largest section of comparison with the state standards. Twenty seven percent of the skill clusters according to educators are not included in the Hawaii State Performance Standards. Only 21% of the skill clusters have a direct relationship with them.

### How Can Industry Skills Be Used?

#### Contextual Learning Projects

Any teacher in any grade can select one or more skills to design contextual learning projects in cooperation with business. With the industry skill standards in hand, the teachers will know what expertise and expectations the industry partners can bring to the project.



## **Work-based Learning**

Some skill standards communicate what students should be able to do before they report for their work-based learning experiences.

## **Skill Certificates**

In Hawaii's School-to-Work reform effort, high school students will be able to choose one of six career pathways for exposure to the actual world of work and expanded work-based learning. In some schools, more specific career majors will be available. Schools which receive funds from Hawaii's federal STW implementation grant are to re-design curriculum and require work experience to help students meet industry skill standards.

All the industry committees support the SCANS skills. These are core skills which all high school graduates need. Each committee provides industry-specific skills in all aspects of industry:

- workplace law and ethics
- cultural awareness and sensitivity
- teamwork/leadership
- understanding of the industry/economy
- oral and written communication
- mathematics
- safety, sanitation, security
- technology
- other areas

## **College**

The University of Hawaii's goal is to develop alternate admissions criteria which will be based on demonstrated competency achievement that will be congruent with the skill certificates.

## **Workplace**

Industry skill standards also have workplace uses. Improved workplace quality and productivity and therefore global competitiveness and enhanced economic development can be achieved if 1) existing workers increase their value, security, portability and career advancement by training up to all the industry skill standards; 2) minimum qualifications are no longer tied to time spent in a job title, but are tied to the actual skills that a person is able to perform; and 3) employers actually use and expect the skill standards daily.

Significant workplace issues in the STW equation center on how ready the workplace will be to receive highly skilled graduates who are critical thinkers, ready and able to make decisions on the frontline. The strategy is to set industry skill standards for the 80% of the future's workforce who are already in the workforce.

### **Implementation of the Industry Skill Standards**

Starting in spring semester 1998, five demonstration projects -- one for each industry -- may be implemented in high schools interested in establishing career majors in the five targeted industries. This is where the performance criteria will be established and the full development of the skill standards will be achieved. The technical assistance committee of the STW Executive Council has mapped out the developmental scheme the schools should follow:

- Select industry skills to work on
- Define level of competency for each skill, thus creating the skill standard
- Describe career major: sequence of courses/modules/etc.
- Integrate skill standards into curriculum
- Develop assessment tools to determine if a student has achieved the competency level
- Address equity issues
- Implement career major at lead sites
- Describe criteria for issuing certificates
- Design what the certificates would include

Then the STW stakeholders would need to establish statewide procedures regarding portable certificates and make these certificates meaningful to community colleges and to the workplace.

The Department of Education's Integration and Tech Prep conferences provide major technical assistance to the local STW partnerships on:

- Modifying curriculum/teaching strategies
- Setting levels of competence for the skill standards when developing/piloting the curriculum in a career path
- Selecting and developing assessment tools
- Providing alternative methods of assessments, without lowering standards, for special needs populations
- Interning at businesses to gain greater teacher understanding of the non-educational workplace environment

## **The Environmental Technology Skills Committee**

The basic question the committee sought to answer is "what are the skill standards for the environment and natural resources industry as mandated by the *School-to-Work Opportunities Act Implementation Grant Application and State Plan?*" Supported by earlier studies, including the Secretary's Commission on Achieving Necessary Skills (SCANS), Goals 2000, Hawaii Goals 2000, and the Hawaii State Performance Standards, the committee defined skill standards as such: "a standard that specified the level of knowledge and competence required to successfully perform work-related functions within an occupational cluster." In essence, skill standards have a set of skills required for work, a level of degree required to successfully perform these skills, and level of agreement among affected parties including industry and education.

Given the breadth of environmental and natural resource concerns, the scope of our efforts focused on three subindustries. Pollution Characterization and Remediation included members familiar with Hazardous Waste Remediation and Removal. Environmental Planning members were from the National Argonne Laboratory, Land Development, and Hawaii Natural Energy Institute and focused on futuristic industries in this area. Natural Resources included members familiar with Forestry, Agriculture, and Aquatic Resources. A special thank you goes to all who participated in the development and validation of the skill clusters (See Appendix C). Of particular note are the following who contributed a great deal of time and effort into this initiative: Lance Yamamoto from the Department of Agriculture, Michael Robinson from the Hawaii Forestry Industry Association, Chulee Groves from Honolulu Community College, and Judy Nishioka from the Pacific Basin Consortium for Hazardous Waste Research and Management. Thank you.

To develop the skills as defined above, sets of skills were developed and validated with industry and educators, degree of importance of these skills were identified by industry, and levels of agreement of these skills between education and industry was done. The result are sets of skill clusters along a career path of laborer, technician, and professional for the three sub industries and a common core that is applicable to all. As a result, these skill clusters have skills, career path levels, and degrees of agreement between industry and educators. It allows the instructor to understand the degree of emphasis as it applies to specific subject areas.

The findings and recommendations are supported by figures and tables and seek to answer the question, "What are the skills for the environment and natural resource industry?" Reaction and input are welcomed and will be used to revise the skills.

**[Fax input to Workforce Development Council at 586-8674.]**

## ENVIRONMENTAL SKILLS

Skills were identified by the committee in three subindustries: Pollution Characterization and Remediation, Environmental Planning, and Natural Resources of Forestry, Agriculture, and Aquatic Resources. Utilizing a matrix to first reflect the industry needs, skills were identified by subindustry and were supported by earlier studies including SCANS, Goals 2000, Hawaii Goals 2000, and the Hawaii State Performance Standards.

## ENVIRONMENTAL SKILL AGREEMENT LEVEL

A sample of educators and industry personnel were asked whether they agreed with the proposed skills developed by the committee. Overall it showed over 90 percent of the skills were acceptable to both groups. Skills that were not in agreement by both groups were omitted. For further details see appendix.

## ENVIRONMENTAL DEGREE OF SKILLS

Industry personnel were asked to rank the level of emphasis should be placed on each skill. The results showed a general progressive relationship between the job complexity and level of skill mastery. Laborer positions in many instances required a general understanding of the skill. Technicians required some application skills while professional positions required a degree of mastery of the skills presented. Of interest, application level mastery of skills for all sub industries were deemed needed for a majority of the skill clusters identified for both the technical and professional positions in industry. Contextual skills learning are important. For further details see appendix.

## SKILL STANDARDS

The following are the skill standards and are based on the skills identified by both industry and educators and the degree of skill level by subindustry and collectively.

## STUDY INTRODUCTION

The basic question the committee sought to answer is “What are the skill standards for the environment and natural resources industry as mandated by the “School-To-Work Opportunities Act Implementation Grant Application and State Plan.” Supported by earlier studies including the Secretary’s Commission of Achieving Necessary Skills, SCANS, Goals 2000, Hawaii Goals 2000, and the Hawaii State Performance Standards, the committee defined skill standards as such: “a standard that specifies the level of knowledge and competence required to successfully perform work-related functions within an occupational cluster. In essence, skill standards have a set of skills required for work, a level of degree required to successfully perform these skills, and level of agreement among affected parties including industry and education.

Given the breadth of environmental and natural resources concerns, the scope of our efforts focused on three sub-industries Pollution Characterization and Remediation, Natural Resources, and Environmental Planning. Pollution Characterization and Remediation included members familiar with Hazardous Waste Remediation and Removal. Environmental Planning members were from the National Argonne Laboratory, Land Development, and Hawaii Natural Energy Institute and focused on futuristic industries in this area. Natural Living Resources included members familiar with Forestry, Agriculture, and Aquatic Resources. A special thank you goes to all who participated in the development and validation of the skill standards. I have listed them in the appendix. Of particular note are the following who contributed a great deal of time and effort into this initiative: Lance Yamamoto from the Department of Agriculture, Michael Robinson from the Hawaii Forestry Industry Association, Chulee Groves from Honolulu Community College, and Judy Nishioka from the Pacific Basin Consortium for Hazardous Waste Research and Management. Thank you.

To develop the skill standards as defined above, sets of skills were developed and validated with industry and educators, degree of importance of these skills were identified by industry, and levels of agreement of these skills between educators and industry was done. The result are sets of skill standards along a career path of laborer, technician, and professional for the three sub industries and a common core that is applicable to all. As a result, these skill standards have skills, career path levels, and degrees of agreement between industry and educators. It allows the instructor to understand the degree of emphasis as it applies to specific subject areas. A sub-issue which was the relationship between these skill standards and the Hawaii State Performance Standards as it deals with the issue of level of agreement.

The findings, conclusion, and recommendations are supported by figures and tables and seeks to answer the question “what are the skill standards for the environment and natural resource industry.”

COMMON CORE - ENVIRONMENTAL TECHNOLOGY

		SKILLS	Industry Agreement	Teachers Agreement	Degree	Marine	Forestry	Pollution	Planning
<b>LABORER</b> Industry Understanding	1	Understand the breadth of the environmental industry and its sub industries.	2.10	3.00	1.00	2.10	1.61	1.56	1.00
	2	Describe the impact of this industry & sub industries on the economy & environment.	2.20	2.75	1.00	2.10	1.61	1.56	1.00
	3	List products generated from this industry & its sub industries.	2.50	2.75	1.00	2.10	1.61	1.56	1.00
	4	List & describe the careers in this industry & its sub industries.	2.54	2.75	1.00	2.10	1.61	1.56	1.00
	5	Outline the guidelines for sustainable, responsible environmental industry & its sub industries.	2.20	2.65	1.00	2.10	1.61	1.56	1.00
	6	Define the major competitors in the industry & its sub industries.	2.20	2.65	1.00	2.10	1.61	1.56	1.00
Employability Skills	7	Development of resume correctly.	3.30	3.50	2.00	2.20	2.00	1.75	1.00
	8	Some historical knowledge of sub industry one is interested in.	2.70	3.00	2.00	2.20	2.00	1.75	1.00
	9	Foster the "aloha" spirit toward others.	3.20	3.33	2.00	2.20	2.00	1.75	1.00
	10	Know oneself, strengths, weaknesses, interest.	3.44	3.75	2.00	2.20	2.00	1.75	1.00
	11	Knowing How to Learn: Acquire & apply new knowledge & skills by using efficient learning techniques in both familiar & changing situations by being aware of learning tools such as personal learning styles, formal learning strategies & informal learning strategies.	2.90	3.00	2.00	2.20	2.00	1.75	1.00
	12	Setting Things in the Mind's Eye: Organize & process symbols, pictures, graphs, objects, and other information.	3.10	3.75	2.00	2.20	2.00	1.75	1.00
	13	Responsibility: Exert high levels of effort to attain goals and persevere hard to become excellent at doing tasks.	3.10	3.75	2.00	2.20	2.00	1.75	1.00

	SKILLS	Industry Agreement	Teachers Agreement	Degree	Marine	Forestry	Pollution	Planning
	14 Self-Esteem: Demonstrate belief in own self-worth & maintain a positive new view of self.	3.40	3.75	2.00	2.20	2.00	1.75	1.00
	15 Sociability: Demonstrate understanding, friendliness, adaptability, empathy, & politeness in new & ongoing group settings.	3.00	3.75	2.00	2.20	2.00	1.75	1.00
	16 Self-Management: Assess own knowledge, skills & abilities accurately.	3.50	3.75	2.00	2.20	2.00	1.75	1.00
	17 Integrity/Honesty: Be trusted & exhibit that trustworthiness.	3.50	3.75	2.00	2.20	2.00	1.75	1.00
	18 Resources: Identify, organize, plan for the use of allocating resources to & be able to demonstrate abilities in time, money material/facilities, human resources, interpersonal, info & systems.	2.80	3.00	2.00	2.20	2.00	1.75	1.00
Communication Skills	19 Develop basic listening skills. (a) attentive, retentive, reflective, evaluative	3.10	3.75	1.08	2.00	1.61	1.25	2.00
	20 Critical listening skills.	3.00	3.75	1.08	2.00	1.61	1.25	2.00
	21 Conventions & courtesies of speaking -Language Arts	3.00	3.50	1.08	2.00	1.61	1.25	2.00
	22 Reading comprehension & critical reading skills. -Language Arts, (a) Literal understanding (b) Inferential understanding (c) identification of main ideas. Basic Writing Skills - basic descriptive composition.	3.00	3.50	1.08	2.00	1.61	1.25	2.00
Foreign Language	23 Cultural awareness & appreciation.	2.20	3.25	0.00	0.00	2.75	0.00	1.00
	24 Comprehension-listening at Level 1.	1.90	3.00	0.00	0.00	2.75	0.00	1.00

SKILLS			Industry Agreement	Teachers Agreement	Degree	Marine	Forestry	Pollution	Planning
Computer and Telecom Skills	25	Understand basic computer terminology-, Related Academic Skills, Computer Skills.	2.81	3.00	1.00	1.89	2.75	0.00	2.00
	26	Understand form & reports generated from computers-spreadsheets, word processing documents, databases.	2.70	3.00	1.00	1.89	2.75	0.00	2.00
	27	Be familiar with industry-specific equipment & systems.	2.91	3.00	1.00	1.89	2.75	0.00	2.00
Sales and Marketing	28	Understand how sales & marketing impacts & contributes to the organization's financial performance.	2.30	3.00	1.00	1.89	1.78	0.00	1.00
Entrepreneurship	29	Know the role of the entrepreneur and one impact on the company and community.	2.50	3.25	1.00	2.11	1.78	0.00	1.00
	30	Understand and utilize the risk taking process of an entrepreneur.	2.50	3.25	1.00	2.11	1.78	0.00	1.00



SKILLS		Industry Agreement	Teachers Agreement	Degree	Marine	Forestry	Pollution	Planning
Human Resources	31 Understand one's position in relation to the hierarchy of the company.	3.20	3.25	1.50	2.11	0.00	0.00	1.00
	32 Understand one's job in relation to the other assignments of the company.	3.20	3.00	1.50	2.11	0.00	0.00	1.00
	33 Understand the underlying culture of the company in relations with one's position.	3.20	3.00	1.50	2.11	0.00	0.00	1.00
	34 Understand the ethical base of the company.	3.30	3.25	1.50	2.11	0.00	0.00	1.00
	35 Understand the company rules and guidelines.	3.44	3.25	1.50	2.11	0.00	0.00	1.00
	36 Adhere to federal, state, and local laws including, labor, equity, drugs, and discrimination.	2.89	3.25	1.50	2.11	0.00	0.00	1.00
<b>TECHNICIAN</b>								
Industry Understanding								
	Skills standards defined for L.							
	1 Understand the impact of competitors in the industry & its sub industries.	3.10	3.25	2.00	2.67	2.00	2.33	2.00
	2 Outline the individual's career path.	3.40	3.50	2.00	2.67	2.00	2.33	2.00
Employability Skills								
	Skills standards defined for L.							
	3 Understand how one interrelates with others in the industry.	3.10	3.50	2.73	2.67	1.59	2.42	2.50
	4 Develop strategies to avoid & mitigate difficult working situations.	3.20	3.50	2.73	2.67	1.59	2.42	2.50
	5 Creative Thinking: Generate new ideas by being able to use imagination frequently combine ideas or information in new ways, make connections between seemingly unrelated ideas, reshape goals in ways that reveal new possibilities.	3.20	3.50	2.73	2.67	1.59	2.42	2.50

SKILLS		Industry Agreement	Teachers Agreement	Degree	Marine	Forestry	Pollution	Planning	
Industry Understanding	6	Problem Solving: Demonstrate the following problem-solving skills by being able to recognize that a problem exists, identify possible reasons for the problem.	3.10	3.25	2.73	2.67	1.59	2.42	2.50
	7	Decision making: Demonstrate effective decision making skills such as specifying goals & restraints, generate alternatives, consider risks.	3.00	3.25	2.73	2.67	1.59	2.42	2.50
	8	Reasoning: Discover a rule or principle underlying the relationship between two or more objectives and apply it in a problem solving mode.	2.80	3.25	2.73	2.67	1.59	2.42	2.50
	9	Technology: Work with a variety of technologies including selecting appropriate procedures, tools, or equipment including computers & related technologies, apply technology to task by understanding overall intent & proper procedures for setup & operation of equipment.	3.00	3.25	2.73	2.67	1.59	2.42	2.50
Communication Skills	10	Labor skills set forth above-listening skills, critical listening skills, conventions of speaking, & critical reading skills.	3.30	4.00	1.86	2.67	1.85	1.25	3.00
	11	Preparation for formal reading.	3.22	3.50	1.86	2.67	1.85	1.25	3.00
	12	Proficient & strategic reading.	3.13	3.50	1.86	2.67	1.85	1.25	3.00
	13	Evaluation of text.	3.25	3.00	1.86	2.67	1.85	1.25	3.00
	14	Relationship between reading, writing, & speaking.	3.25	3.00	1.86	2.67	1.85	1.25	3.00
	15	Functions of writing: (a) inform, summarize, promote an idea, plan.	3.29	3.50	1.86	2.67	1.85	1.25	3.00
Foreign Language	16	Labor skills mentioned above-culture awareness, level 1 comprehension.	2.87	3.00	1.00	0.00	3.00	1.00	2.00

SKILLS		Industry Agreement	Teachers Agreement	Degree	Marine	Forestry	Pollution	Planning
Computer and Telecom Skills	17 Level 2 comprehension-main idea, follow essential info.	2.75	2.66	1.00	0.00	3.00	1.00	2.00
	18 Level 2 speaking-relay a message, summarize essential info., give simple directions.	2.77	2.66	1.00	0.00	3.00	1.00	2.00
	Labor skills mentioned above.							
	19 Utilization of basic computer applications-word processing, spreadsheet, database.	3.33	3.75	1.00	2.50	1.95	1.82	2.00
	20 Basic report generation.	3.40	3.75	1.00	2.50	1.95	1.82	2.00
	21 Utilization of basic networking skills: e-mail, browsing, page development.	3.20	3.40	1.00	2.50	1.95	1.82	2.00
	Skill standards of laborer as defined above.							
	22 Identify the components of a marketing and sales program and the role of the written marketing plan.	3.20	3.50	1.91	2.50	2.53	1.67	2.50
	23 Explain marketing activities (selling, promotion, purchasing).	2.80	3.40	1.91	2.50	2.53	1.67	2.50
	24 Identify external & internal public relations strategies.	2.80	3.50	1.91	2.50	2.53	1.67	2.50
Sales and Marketing	25 Know the importance of the environment of the workplace's location.	2.89	3.50	1.91	2.50	2.53	1.67	2.50
	26 Know the product.	3.22	3.50	1.91	2.50	2.53	1.67	2.50

SKILLS		Industry Agreement	Teachers Agreement	Degree	Marine	Forestry	Pollution	Planning
Entrepreneurship	Skills standards defined for L.							
	27 Development of risk taking plans including the impact of risk on the operation.	2.60	3.50	2.00	2.67	2.40	2.50	2.00
	28 Development of network of sources of support and contacts.	3.00	3.50	2.00	2.67	2.40	2.50	2.00
Human Resources	Skills standards defined for L.							
	29 Understand basic organization of American law.	3.00	3.25	1.88	2.33	2.20	2.50	2.00
	30 Demonstrate basic knowledge of laws governing employment.	3.00	3.25	1.88	2.33	2.20	2.50	2.00
	31 Develop a working knowledge of American tax system for personal purposes.	2.90	3.25	1.88	2.33	2.20	2.50	2.00
<b>PROFESSIONAL</b>								
Industry Understanding								
	Skills standards defined for L and T.							
	1 Commitment to master sub industry of interest.	3.50	3.75	2.97	2.67	2.76	2.75	3.00
	2 Impact of particular sub industry on the various sectors of economy.	3.40	3.00	2.97	2.67	2.76	2.75	3.00
	3 Provide leadership in directing particular sub industry to a greater degree of professionalism & economic & environmental growth.	3.44	3.00	2.97	2.67	2.76	2.75	3.00
Employability Skills								
	Skills standards defined for L and T.							
	4 Understand industry job requirements.	3.50	3.50	3.00	2.75	2.24	2.75	2.50
	5 Utilize conflict resolution, negotiation, mediation, and arbitration skills.	3.40	3.25	3.00	2.75	2.24	2.75	2.50
	6 Problem Solving: Technician level & the ability to devise & implement a plan of action to resolve the problem, evaluate & monitor the progress of an action plan, revise plan as indicated by findings.	3.40	3.25	3.00	2.75	2.24	2.75	2.50

SKILLS		Industry Agreement	Teachers Agreement	Degree	Marine	Forestry	Pollution	Planning
Communication Skills	7 Decision making: Technician skill level & consider risks & evaluation & choose the best alternatives.	3.60	3.00	3.00	2.75	2.24	2.75	2.50
	8 Technology: Technician level skills & ability to maintain & trouble shoot equipment including computers, & other technologies to prevent, identify, or solve problems.	3.50	3.00	3.00	2.75	2.24	2.75	2.50
	Skills standards defined for L and T.							
	9 Reading comprehension & critical reading skills. (a) Literal understanding, (b) inferential understanding, (c) identification of main ideas, (d) evaluation of text.	3.22	3.75	3.00	2.75	2.55	2.75	3.00
	10 Word analysis skills & vocab building skills.	3.22	3.50	3.00	2.75	2.55	2.75	3.00
	11 Elements of text.	3.22	3.25	3.00	2.75	2.55	2.75	3.00
	12 Wide variety of sources of literature.	3.22	3.25	3.00	2.75	2.55	2.75	3.00
	13 Functions of writing & the writing process.	3.22	3.25	3.00	2.75	2.55	2.75	3.00
	14 Rhetorical strategies in written & verbal contexts.	3.55	3.33	3.00	2.75	2.55	2.75	3.00
Foreign Language	Skills standards defined for L and T.							
	15 Comprehension - Level 3 - comprehend questions & answers, main ideas & supporting detail.	3.00	2.66	1.25	3.00	2.25	0.00	3.00
	16 Speaking-Level 3-describe people, places & events, narrate a sequence of events, give directions.	3.00	2.66	1.25	3.00	2.25	0.00	3.00
Computer and Telecom Skills	Skills standards defined for L and T.							
	17 Explanation & utilization of current operating system.	3.44	3.50	2.97	2.73	2.79	2.50	3.00
	18 Modeling for specific sets of circumstances.	3.20	3.30	2.97	2.73	2.79	2.50	3.00
	19 Manipulation of data for decision making.	3.44	3.33	2.97	2.73	2.79	2.50	3.00
	20 Specific report generation.	3.33	3.66	2.97	2.73	2.79	2.50	3.00
	21 Utilization of network skills - web page development, ftp, html coding, e-mail, searches.	3.40	3.33	2.97	2.73	2.79	2.50	3.00

	SKILLS	Industry Agreement	Teachers Agreement	Degree	Marine	Forestry	Pollution	Planning
	22 Actively participate in global network activities - collaborative efforts.	3.27	3.00	2.97	2.73	2.79	2.50	3.00
Sales and Marketing	Skills standards defined for L and T.							
	23 Know the role of community involvement & fulfilling civic responsibilities, including trade & brotherhood organizations in marketing.	3.27	3.67	2.82	2.20	2.31	0.00	2.00
	24 Outline the components of a marketing plan for particular types of operations (e.g. target markets, niche marketing, positioning statement, pricing, media).	3.40	3.33	2.82	2.20	2.31	0.00	2.00
	25 Know the product or service current and historical marketing trends.	3.44	3.33	2.82	2.20	2.31	0.00	2.00
Entrepreneurship	Skills standards defined for L and T.							
	26 Development of contingency plans given the risks of the operation.	3.30	3.33	2.53	2.50	1.32	0.00	2.00
	27 Develop working relationships with advisory groups.	3.40	3.33	2.53	2.50	1.32	0.00	2.00
	28 Develop working relationships with owners of company & contribute ones a analysis of the risks on the operation to the decision making process.	3.55	3.25	2.53	2.50	1.32	0.00	2.00
Human Resources	Skills standards defined for L and T.							
	29 Understand and interpret laws which affect the workplace.	3.40	3.50	2.76	2.60	2.25	0.00	2.00
	30 Be aware of external events which impact laws and labor practices of the company.	3.40	3.33	2.76	2.60	2.25	0.00	2.00
	31 Participate in community affairs which have long-term impact on the laborer.	3.30	3.25	2.76	2.60	2.25	0.00	2.00

# NATURAL RESOURCES: AGRICULTURE

<u>POSITION</u> <u>SKILL CLUSTER</u>		<u>SKILLS</u>	<u>DEGREE</u>
<b>LABORER</b>			
Health/Safety	1	Understand and follow established safety program, e.g. personnel responsibilities, safety procedures, use of personal protective equipment, etc.	1.85
	2	Understand general concepts relating to the environment and ecology	1.00
	3	Follow established methods of handling chemicals	1.00
	4	Understand that there are general interactions of applicable chemicals with the environment and man	1.00
	5	Follow established procedures to prevent product contamination	1.00
General Science	6	Maintain a basic understanding of high school level science	1.00
	7	Follow established procedures to prevent introduction and spread of plant and animal diseases among healthy stock	1.00
Industry Technology	8	Operate and maintain applicable tools and equipment	2.00
Production	9	Understand industry generally	1.82
	10	Maintain high level of proficiency in specific skill areas	1.82
<b>TECHNICIAN</b>			
Health/Safety	1	Assist in the development of safety plan/procedures	2.45
	2	Assist/coordinate the implementation of specific aspects of safety program	2.45
Environ. Science	3	Implement and supervise in the field: programs for handling, administering and disposing of fertilizer, livestock supplements, pesticides and other chemicals	2.20
	4	Identify pesticides/chemicals according to toxicity and formulations	2.20
	5	Understand interactions of chemicals on plants, animals, and environment	2.20
Math	6	Perform basic mathematical operations & computations with and without using calculator	2.33
	7	Perform basic conversions between English and metric units	2.33
	8	Apply basic geometry and units of measure system of measurement, linear and square measurement and, area and volume to ratios, proportions, measurement	2.33
	9	Know basic algebra fundamentals, basic laws of algebra, linear equations, rational algebraic expressions	2.33
	10	Apply basic descriptive statistics	2.33

<b>POSITION SKILL CLUSTER</b>	<b>SKILLS</b>	<b>DEGREE</b>
General Science	11 Possess general knowledge in the following: basic physics, chemistry, biology, botany, and zoology	2.19
	12 Perform general animal & plant production, plant identification, livestock breeds and classification, plant propagation, animal reproduction, soil preparation & management, animal & plant diseases, and integrated pest management (integrated biological, chemical, & mechanical pest control) general lab work and basic research fundamentals	2.19
Industry Technology	13 Operate agricultural mechanics, processing facilities, laboratory equipment and computer systems	2.20
Environmental Laws	14 Know generally all applicable safety laws and regulations e.g. State Dept. of Health, Agriculture, EPA,. etc.	1.60
Management	15 Perform line management/supervisory functions, i.e. human resource and other administrative duties	2.25
Production	16 Select appropriate plant varieties, select appropriate growing sites, and determine appropriate cultural practices (planting, propagation, fertilization, irrigation, pest control, harvesting, etc.)	2.15
	17 Implement selective breeding programs (according to desirable traits), implement appropriate nutritional, health and general livestock management practices	2.15
	18 Determine production economics, i.e. profit maximization	2.15
<b>PROFESSIONAL</b>		
Health/Safety	1 Interprets all applicable safety laws and regulations, e.g. HIOSH, OSHA, etc.	2.88
	2 Develop and implement safety programs in compliance with applicable laws and regulations	2.88
Environ. Science	3. Develop and implement programs described in the Laborer & Technician level	2.88
	4 Know environmental science, pesticides and chemical analysis	2.88
	5. Perform inferential statistics confidence intervals, null hypothesis, predicting population from sample testing, linear correlation, regression analysis	2.36
	6 Know mathematics of investment: principle & interest, mortgages, installment buying, profit & loss, taxes, commissions, brokerage, etc.	2.36



<u>POSITION SKILL CLUSTER</u>	<u>SKILLS</u>	<u>DEGREE</u>
General Science	7 Practice applied physics, organic and inorganic chemistry, plant biochemistry, plant physiology, molecular biology, microbiology, plant pathology, animal/plant genetics, veterinary sciences, entomology, and agricultural engineering	2.79
Industry Technology	8 Understand GPS & GIS, biotechnology, (laboratory/diagnostic/experimental equipment), and engineering technology (environmentally compatible biosystems)	3.00
Environmental Laws	9 Understand and interpret all applicable safety laws and regulations, e.g. State Department of Health, Agriculture, EPA, etc.	1.85
	10 Develop, implement, and provide technical assistance for programs based on interpretations of applicable laws and regulations	1.85
Management	11 Handle complex multi-dimensional projects and programs	2.50
	12 Apply advanced management concepts, e.g. develop comprehensive management programs, provide leadership in difficult situations	2.50
Production	13 Develop advanced livestock/crop production and management programs	2.88
	14 Apply advanced concepts in agricultural economics and agribusiness	2.88

## NATURAL RESOURCES: FORESTRY

<u>POSITION</u> <u>SKILL CLUSTER</u>	<u>SKILLS</u>	<u>DEGREE</u>
<b>LABORER</b>		
Health/Safety	1 Recognize and identify potentially hazardous or unsafe conditions	2.48
	2 Correct hazardous or unsafe conditions when possible	2.48
	3 Communicate presence of such conditions when possible	2.48
	4 Understand and follow regulations and standards on health and safety	2.48
	5 Use personal protective equipment as required	2.48
	6 Understand and follow security standards and policies	2.48
	7 Participate in health and safety training for employees	2.48
Environ. Science	8 Obtain information from MSDSs to select appropriate work methods when handling chemicals	1.92
	9 Follow instructions of MSDS s and label on chemical disposal practices	1.92
Math	10 Apply basic math skills such as addition, subtraction, multiplication, division, fractions, decimals, measurement, time, money, and percentages	1.26
	11 Read and record measuring scales for areas, weights, and volumes	1.26
General Science	12 Develop a clear understanding of basic science principles as currently taught at the high school level, including general biology, nutrient and water cycles, soil erosion controls techniques, animal population dynamics, and pollution control processes	1.92
Industry Technology	13 Operate basic hand tools and some power tools	1.75
Management	14 Understand the roles of mgmt. and the demands and responsibility of those positions	1.75
	15 Understand how managers are selected and the skills they possess	1.75
Production	16 Understand the production process in concept and how the worker's effort is relied upon for quality production and service	2.64
	17 Apply in the skills required by the company in order to produce their portion of the product or service at a high level of proficiency	2.64

<b>POSITION</b> <b>SKILL CLUSTER</b> <b>TECHNICIAN</b>	<b>SKILL STANDARDS</b>	<b>DEGREE</b>
Health/Safety	1 Select appropriate types of personal protective equipment	2.70
	2 Assist in the development and implementation of safety and health programs	2.70
	3 Conduct health and safety training for employees	2.70
	4 Complete reports on health and safety program status	2.70
Environ. Science	5 Possess the skills required at the L level	1.56
Math	6 Use a calculator to solve algebraic problems involving fractions, decimal, and percents	2.00
	7 Convert measurements from English to metric units and vice versa	2.00
	8 Create, read, and/or compare ratios	2.00
	9 Measure radii heights, diameters, and slopes	2.00
	10 Calculate circumference, perimeter, area, and volume	2.00
	11 Read, interpolate, and extrapolate data from tables and graphs	2.00
	12 Distinguish between mean, mode, and median as measures of central tendency	2.00
	13 Understand and use forest mensuration concepts	2.00
General Science	14 Understand basic Physics chemistry, botany, and zoology	1.56
	15 Some technicians may need to understand dendrology, silviculture, and structural design	1.56
Industry Technology	16 Operate most power tools, including those used for woodworking	2.75
	17 Some technicians will need to perform cartography, mechanics, heavy equipment operation, and/or forest mensuration	2.75
	18 Read and use scale drawings, maps, and aerial photographs to determine distances and directions	2.75
Environmental Laws	19 Develop a more complete knowledge of env laws and regs	2.40
	20 Gain access to and use guiding documents to plan and implement appropriate and legal actions	2.40
Management	21 Assume minor managerial roles on an as needed basis. This includes skills such as supervision, project development, analysis, and evaluation, budgeting, purchasing, and time management	2.40
Production	22 Understand production process in detail	2.59
	23 Offer input and/or feedback to managers for improving/augmenting production	2.59

<u>POSITION SKILL CLUSTER</u>	<u>SKILL STANDARDS</u>	<u>DEGREE</u>
<b>PROFESSIONAL</b>		
Health/Safety	1 Develop, implement, and manage health and safety programs	2.24
	2 Recommend corrective measure for hazards occurring at the work place	2.24
Environ. Science	3 Possess the skills required at the L and T levels	2.72
Math	4 Possess skills required at the L and T levels	2.13
General Science	5 Apply concepts of ecology, entomology, protection sciences, plant pathology, soils, hydrology, civil engineering, forest, and geology	2.72
Industry Technology	6 Interpret higher technologies such as geographic information systems, global positioning devices, aerial photo interpretation, and computer modeling	2.26
Environmental Laws	7 Identify applicable laws and regs	2.00
	8 Track current developments of applicable regulations and be cognizant of potential impacts from changed or proposed regs.	2.00
	9 Review existing programs as necessary in response to changing regs.	2.00
Management	10 Function as managers on a daily basis with complex projects and corresponding problems	2.13
	11 perform all mgmt. skills with high proficiency	2.13
Production	12 Understand fully all aspects of the production process	2.38
	13 Make changes to the process when necessary	2.38
	14 Solicit input/feedback from employees	2.38

# NATURAL RESOURCES: MARINE

<b>POSITION SKILL CLUSTER LABORER</b>		<b><u>SKILLS</u></b>	<b><u>DEGREE</u></b>
Health/Safety	1	Understand basic safety procedures in Labs and Farms	2.00
Environ. Science	2	Know environmental science generally	2.67
Math	3	Apply basic Arithmetic (whole numbers, functions, decimal, and percent)	2.11
General Science	4	Understand concepts in general biology & aquaculture	2.11
Industry Technology	5	Use tools on board ships, labs, and farms	2.00
Environmental Laws	6	Know generally the pertinent laws and regulations in aquaculture operations and waste water discharges	1.80
Management	7	Understand the concepts in aquaculture management	2.11
Production	8	Perform basic aquaculture operation	2.00
<b>TECHNICIAN</b>			
Health/Safety	1	Control pathogens (e.g. bacteria, parasites) and food processing	2.67
Environ. Science	2	Understand water, air, land pollution control methods	2.20
	3.	Know the effects of introduced organisms into a new environment	2.20
	4	Operate waste water treatment	2.20
	5	Understand principles of ecosystem development and studies	2.20
	6	Measure hydrographic properties (e.g. nutrients)	2.20
Math	7	Use scientific calculator	2.67
	8	Apply basic Algebra, geometry, descriptive statistics	2.67
General Science	9	Know the principles of aquaculture, oceanography, marine biology and ecology	2.67
	10	Identify fish & invertebrates	2.67
Industry Technology	11	Use water quality monitoring tools	2.67
	12	Use tools for feed preparation and disease treatment	2.67
	13	Collect and analyze ship board data	2.67
	14	Dissect fish & invertebrates	2.67
	15	Test water quality (e.g. test for e coli)	2.67
Environmental Laws	16	Understand the concepts of environmental laws as they apply to laws and regs.	2.25
	17	Understand import laws and regulations for newly introduced species	2.25

<b><u>POSITION SKILL CLUSTER</u></b>	<b><u>SKILLS</u></b>	<b><u>DEGREE</u></b>
Management	18 Manage labs in biology, chemistry, and oceanography	2.67
	19 Understand Fishery management	2.67
Production	20 Perform water quality monitoring	2.60
	21 Prepare feed and treat disease	2.60
	22 Breed animal	2.60
<b>PROFESSIONAL</b>		
Health/Safety	1 Know nutrition & microbiology	2.67
Environ. Science	2 Know advanced levels of environmental science including Demography and Ecosystem	2.67
Math	3 Apply intermediate algebra	2.67
	4 Apply inferential statistics	2.67
General Science	5 Apply concepts in Food and Nutrition	2.75
	6 Understand general chemistry (inorganic and organic)	2.75
	7 Know advance oceanography and marine biology	2.75
	8 Know the principles of aquaculture	2.75
	9 Know the principles of ecology	2.75
Industry Technology	10 Design and use tools for Hatchery and Ocean Farming	2.75
	11 Use tools in animal science and genetics	2.75
Environmental Laws	12 Understand and utilize specific environmental laws applicable to aquatic resources	2.25
	13 Understand the impact of such laws on existing operations	2.25
	14 Track developments in this area	2.25
	15 Review and modify existing programs as necessary in response to changing regs.	2.25
Management	16 Manage Hatchery and Farming	2.20
	17 Operate labs in biology & marines science fields	2.20
	18 Apply computers in experimental design and data analysis	2.20
Production	19 Utilize research techniques in oceanography and marine biology	2.83
	20 Know advanced level of animal science and genetics	2.83

STW ENVIRONMENTAL AND NATURAL RESOURCE  
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# **Health Care Education Reform:**

## *Skills and Knowledge Standards for Hawai'i's High School Health Occupations Programs*

† *Academic Foundations* † *Personal Wellness* † *Employability Skills*

† *Legal Systems and Ethics* † *Safety Practices*

† *Communication* † *Interpersonal Dynamics* † *Systems*

† *Technology* † *Socioeconomic and Cultural Awareness/Sensitivity*

A collaborative effort between industry and education to establish skills and knowledge standards for entry level health care occupations.

To be used by industry to identify skills and knowledge acquired by graduates of qualifying high school health occupations classes or health academies.

For use by health occupations program instructors in developing curriculum to meet qualifications for entry level employment in the health care industry.

To prepare our youth for entry level employment in the health care industry or higher education.

Hawai'i Health Skills and Knowledge Standards Committee  
c/o State Department of Labor and Industrial Relations  
830 Punchbowl Street, Room 417  
Honolulu, Hawai'i 96813

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# VISION

## **BY THE YEAR 2000, WE ENVISION:**

- *RECOGNITION AND APPROVAL OF THESE STANDARDS BY THE HEALTH CARE COMMUNITY FOR THE PURPOSES OF WORK-BASED LEARNING OPPORTUNITIES AND ENTRY LEVEL EMPLOYMENT.*
- *RECOGNITION AND ACCEPTANCE OF THESE STANDARDS BY THE DEPARTMENT OF EDUCATION FOR THE PURPOSES OF PREPARING STUDENTS FOR THE WORKPLACE AND HIGHER EDUCATION.*
- *ADOPTION OF THESE STANDARDS BY STATEWIDE DEPARTMENT OF EDUCATION HEALTH OCCUPATIONS PROGRAMS AS PART OF THEIR CURRICULUM.*

# MISSION

**TO DEVELOP STANDARDS FOR ENTRY LEVEL SKILLS AND KNOWLEDGE  
FOR HAWAI'I'S HEALTH CARE INDUSTRY**

*“Look outside your company and change your view of your responsibilities for human resource development. Your old responsibilities were to select the best available applicants and to retain those you hired. Your new responsibilities must be to improve the way you organize work and to develop the human resources in your community, your firm, and your nation.”*

(LEARNING A LIVING: A BLUEPRINT FOR HIGH PERFORMANCE -  
A SCANS REPORT FOR AMERICA 2000)

## **INTRODUCTION**

Rapid changes in computer applications, communications and global competition are requiring an American workforce that is more flexible and highly skilled than just a decade ago. Hospitals, physician offices and other medical facilities are increasingly becoming very high performance workplaces. New drugs, procedures, and equipment are constantly being developed and introduced to the health industry, thus requiring nearly all occupations in the field to be current on the latest technological developments.

Additionally, Medicare/Medicaid reform, new international markets, increasing outpatient surgical centers and a growing elderly population are just a few of many factors reshaping the health care industry. Considering the multitude of information and changes in the medical field there exists a need for industry skill standards.

## **WHAT ARE SKILLS AND KNOWLEDGE STANDARDS?**

Development of skill standards is a collaborative effort by the health and education sectors to:

- meet the labor needs of industry,
- meet and improve preparation of students for careers in health care, and
- maintain our nation's global workforce competitiveness.

Skill standards will serve to communicate to public and private sector education and training providers what employers expect graduates to achieve to become job-ready for the high-performance workplace.

“The most useful way to show the relationship among academic, work-readiness, and skill standards and more specific occupational standards is a stairstep of increasingly more specific sets of skills and knowledge that are required as one moves from 1) a purely educational focus to 2) a broad industry or occupational focus and then to 3) a more job-specific focus.

1. Academic and work-readiness standards relate to high-level skills that everyone needs to function in a high-performance economy, regardless of the specific career they pursue.

2. Skill standards relate to a common set of the skills and knowledge that workers generally need to perform in high-performance workplaces within broad industrial or occupational clusters.

3. Other workplace standards, including those already developed by industry and professional associations, unions, licensing authorities, and individual firms — and perhaps some of those being developed under the federally supported skill standards pilot projects — relate to what workers currently need to know and be able to do in either specific occupations or specific jobs.”<sup>1</sup>

In 1992, the U.S. Departments of Education and Labor funded 22 pilot projects to develop skill standards for various occupational clusters. Some of the projects include standards for **Agricultural Biotechnology, Computer Aided Drafting and Design, Electrical Construction, Hazardous Materials Management, Health Care, Hospitality and Tourism, Human Services, and Retail Trade.**



# *1. Academic Foundations*

Demonstrate academic skills and knowledge of subject matter as required for proficiency in a health services area of emphasis.

- 1) Assume responsibility and accountability for own learning.
- 2) Use written and verbal communication skills effectively.
- 3) Use critical and creative thinking and logical reasoning to analyze and solve problems.
- 4) Apply mathematic principles and functions for purposes of measurement, analysis, and computation.
- 5) Apply knowledge of basic sciences such as biology, human anatomy and physiology, chemistry, physics, and basic research methodology to health services.
- 6) Interpret and utilize medical terminology and abbreviations.
- 7) Apply knowledge of social, health, and behavioral sciences to health services.
- 8) Apply knowledge of the arts and humanities to health services.

## **Skills and Knowledge**

### **Basic**

#### **Critical Thinking**

using active, learning strategies (e.g. case studies)  
 setting goals  
 defining the problem  
 analyzing the problem/situation  
 evaluating available information  
 prioritizing  
 developing and analyzing potential solutions or options  
 allocating resources  
 recognizing and developing necessary additional skills  
 adopting cognitive strategies  
 making defensible decisions  
 monitoring progress toward goals  
 incorporating creativity, intuition, hunches

#### **Mathematics**

metric system  
 math for dosages  
 measurement skills  
 addition, subtraction, multiplication, division  
 formulas  
 ratio/proportions  
 fractions  
 metric units/conversions  
 scientific terminology  
 beginning algebra  
 geometry\*  
 trigonometry\*  
 use of hand-held programmable calculator\*

#### **Research Methodology**

scientific method  
 observation techniques  
 computer research skills  
 library skills  
 use statistical data

#### **Health Education**

community health  
 consumer health  
 environmental health  
 family life  
 mental and emotional health  
 injury prevention and safety

nutrition  
 personal health  
 prevention and control of disease  
 substance abuse

#### **Medical Terminology**

prefixes  
 suffixes  
 combining forms  
 Latin/Greek roots  
 medical abbreviations

#### **Anatomy and Physiology\*\***

anatomy  
 - muscle groups  
 - how muscles build  
 - body mechanics  
 - positioning  
 physiology  
 - body systems  
 - how the body works and responds to exercise  
 - normal/abnormal body functions  
 - body movement  
 basic understanding of medical  
 - conditions, pre-disposing factors and contraindications  
 kinesiology  
 - range of motion/aging  
 perceptual skills  
 - figure/ground  
 - body/space  
 - visual perception/exercise physiology

#### **Biology\*\*\***

cellular anatomy and function  
 basic anatomy  
 basic genetics  
 body systems

#### **Chemistry\*\*\***

fluid/electrolyte balance  
 pH balance  
 compounds  
 therapeutic gases  
 IV fluid composition (basic)

organic chemistry (overview)  
 inorganic chemistry (overview)

#### **Sociology\*\*\***

social classes  
 group dynamics  
 families  
 diversity  
 religion  
 alcoholism and drug dependency  
 cultural awareness  
 violence  
 relationships between groups

#### **Psychology\*\*\***

growth and development  
 hierarchy of needs  
 personality types  
 death and dying  
 self-awareness  
 self-esteem  
 mental health/illness  
 different learning styles

#### **Enrichment Electives**

#### **Arts and Humanities**

art  
 music

#### **Human Development**

#### **Microbiology**

blood cells  
 bacteria/virus  
 fungus  
 protozoa  
 rickettsia  
 helminths

#### **Physics**

pulleys  
 charges/polarities  
 electricity

\* Higher level skills  
 \*\* This area can be included into health occupations class or taught as a separate subject.  
 \*\*\* Recommended courses of studies.



## 2. *Personal Wellness*

Demonstrate an understanding of and apply the principles for achieving and maintaining *wellness*\*

- 1) Relate the concept of wellness to its effect on the quality of life.
- 2) Assess and recognize risk factors associated with wellness/illness.
- 3) Assess and analyze the impact of human development on wellness.
- 4) Assess and analyze the role of *environment*\* in health issues.
- 5) Identify the role of self-responsibility in developing healthy behavior.
- 6) Demonstrate knowledge of social issues related to personal health and wellness.

\***Wellness** - state of optimal well-being; not simply the absence of illness but an improved quality of life resulting from enhanced physical, social and mental health.

\***Environment** - physical structures, climate, soil, non-living things, and living things (people, animals, plants), society dynamics and norms that surround an individual.



## **Skills and Knowledge**

wellness  
disease-wellness continuum  
preventive health practices  
traditional vs. alternative health practices

risk factors  
health risk assessment

human growth and development  
death and dying  
aging  
personality types

patient/peer education  
evaluating health and wellness  
    information for the consumer  
survey skills

health history  
self-awareness  
self-motivation/responsibility  
personal plan to achieve wellness  
coping skills  
stress management  
diet and nutrition  
fitness, mental and physical

principles of exercise and fitness  
depression  
alcoholism and drug dependency  
positive/negative peer pressure  
violence  
sexual harassment  
citizenship  
community service  
public health  
environmental hazards/health  
family life



### 3. *Employability Skills*

Utilize employability skills to enhance occupational opportunities, job satisfaction and the quality of contribution within the health services field.

- 1) Demonstrate positive personal work habits such as consistent attendance, time management, individual responsibility, flexibility, teamwork and effective use of resources.
- 2) Consistently conduct and demonstrate professional attitude, communication, conduct and appearance.
- 3) Demonstrate effective techniques required for the *employment process*.\*
- 4) Evaluate health career options, career potential, and preparation requirements.
- 5) Demonstrate initiative in acquiring and upgrading knowledge and skills necessary for continued employment and career advancement.

\**Employment process* - includes identifying sources of employment, initiating contact with potential employers, writing letters of interest, filling out application forms, making appointments for job interviews, interviewing for the job, following up applications, writing and updating a resume, accepting and responding to evaluation and feedback, responding to job offers and terminating employment.

## **Skills and Knowledge**

work ethic  
code of ethics  
confidentiality  
team building skills  
problem solving  
self-motivation  
initiative and creativity  
assertiveness  
networking  
ability to finish tasks

professional conduct  
sexual harassment  
affirmative action  
appropriate dress and appearance

communication skills (oral, written)  
asking questions appropriately  
interviewing skills  
conflict resolution

job retention[see Standard 3, 1)]  
job seeking skills [see Standard 3, 3)]  
customer service  
job leaving (giving notice, termination, resignation)  
collective bargaining  
giving and receiving constructive criticism

education and career planning  
professional/personal growth and continuing education



## 4. *Legal Systems and Ethics*

Demonstrate the ability to make effective decisions consistent with legal systems and ethical principles.

- 1) Demonstrate knowledge of the fundamental principles of *ethics*\* and *legal systems*\* related to health services.
- 2) Distinguish between legal and ethical behavior and responsibilities of health service providers.
- 3) Interpret individual responsibility for professional conduct and accountability within ethical and legal boundaries.
- 4) Comply with and enforce policies and procedures of client confidentiality.
- 5) Identify the role of certification and licensure requirements of health services personnel and facilities.

*\*Ethics* - a system or philosophy of conduct and values practiced by an individual or groups.

*\*Legal systems* - a group of related rules, procedures, guidelines, instructions requirements, regulations, precepts, statutes, and ordinances that govern the actions of individuals and organizations prescribed and /or formally recognized as binding and enforced by a controlling authority.

## Skills and Knowledge

basic legal terminology  
scope of practice  
patient rights  
criminal vs. civil law  
consent  
governmental impact on health care  
contracts  
standards of care  
employee rights  
importance of documentation/charting  
professional liability insurance  
malpractice/ramifications of malpractice law suits  
certification and licensure requirements for professionals,  
    health care facilities, governing boards, and state agencies  
professional conduct

principles of ethics  
code of ethics  
principles of ethical decision making  
bioethics\*  
confidentiality and legal ramifications  
professional organizations  
cultural sensitivity  
personal vs. professional ethics  
socioeconomic sensitivity  
professional integrity  
legal and ethical issues related to technology

\***Bioethics** - the study of ethical and moral issues involved in the application of biological and medical findings, as in the field of genetic engineering, neurobiology, and drug research.



## 5. *Safety Practices*

Comply with health and safety requirements to protect other individuals and self.

- 1) Identify and comply with federal, state and institutional health and safety regulations.
- 2) Identify and respond appropriately to existing and potential safety hazards, including workplace violence.
- 3) Demonstrate knowledge of basic first aid and emergency care.
- 4) Comprehend and apply principles and techniques of infectious disease control.
- 5) Recognize and apply the principles of *body mechanics*\* to prevent injury and accidents.

\* *Body mechanics* - the use of groups of muscle and bone structures that facilitate movement in performing physical movement (associated with patient/client care, worker safety, physical fitness, etc).

## **Skills and Knowledge**

physical and mental health screening (eg.TB, Rubella screening)  
Occupational Safety and Health Administration (OSHA), Centers for Disease Control (CDC)  
hazardous material (HAZMAT and MSDS)  
infectious diseases  
transmission of communicable diseases  
blood borne pathogens  
universal precautions  
immunization (e.g. Hepatitis B, Tetanus-Diphtheria, Measles-Mumps-Rubella,  
Chicken Pox varicella, Influenza vaccine)

emergency protocol/response  
fire and disaster procedures  
CPR/First Aid

body mechanics  
ergonomics  
patient transfer

workplace violence  
conflict resolution

safety issues in diverse settings/situations



## 6. *Communication*

Demonstrate and apply effective communications skills in a health service setting.

- 1) Communicate in a clear, logical and convincing style.
- 2) Compiles written communication using correct spelling, grammar and format.
- 3) Adapt writing, speaking, listening, and teaching strategies to specific audiences and purposes.
- 4) Use and interpret *technical information*\* in oral and written form.
- 5) Clearly give and accurately follow directions.
- 6) Acquire, use and transfer information accurately and in a timely manner.

\* *Technical information* - information pertaining to and used in a particular field and/or occupation.



## **Skills and Knowledge**

verbal/nonverbal communication (see Standard 7)

nonverbal communication (body language)

barriers to communication

effective listening techniques

documentation strategies (citing sources, plagiarism)

medical terminology

customer service (courtesy, tact, problem-solving, referral)

telephone technique, etiquette, protocol

technical report writing

giving and receiving constructive criticism

electronic communication (see Standard 9)



## 7. *Interpersonal Dynamics*

Apply skills in interpersonal dynamics that recognize individual differences and basic needs of individuals at various stages of growth and development.

- 1) Assess the concept of self in personal and group interaction.
- 2) Apply *techniques of effective listening*\* to interaction with others.
- 3) Demonstrate knowledge of human behavior relating to human needs in various stages of growth and development.
- 4) Demonstrate an understanding of basic principles of group dynamics.
- 5) Practice team membership skills such as cooperation, collaboration, leadership, and conflict resolution.
- 6) Identify and consider the implications of *diversity* \* in interaction with patients/clients, co-workers and supervisors.

\**Techniques of effective listening* - the ability to use thoughtful attention and to respond to verbal and nonverbal information appropriately.

\**Diversity* - includes differences based on gender, sexual orientation, culture, race, ethnicity, age, language, religion, disability, socioeconomic class or any other factor which might separate individuals or groups.

## **Skills and Knowledge**

interpersonal skills/self-assessment  
role of individual  
group roles  
assessment of strengths and weaknesses  
personal values  
diversity  
providing leadership

basic listening skills  
body language  
verbal or nonverbal feedback  
paraphrasing and summarizing

emotions - recognizing and managing emotions  
theories such as Maslow, Erickson, Kolberg, Adler, and Piaget  
stages of growth and development  
life stages- prenatal to gerontology  
death and dying  
respect and caring  
leadership development through student organizations -  
Health Occupations Students of America (HOSA)

effective confrontation  
effective questioning  
positive and negative coping strategies  
power and empowerment

developing and maintaining trust  
facilitating group goal attainment  
group purpose and mission  
building consensus  
negotiating agreements  
conflict resolution  
encouraging open discussion of ideas

meeting the needs of others such as clients or patients  
cultural norms related to health care  
minority demographics  
social and ethnic differences  
communication/language arts skills (see Standard 6)



## 8. *Systems*

Demonstrate and apply basic knowledge of systems and their interrelationships in health care delivery.

- 1) Identify the components and recognize the interrelationships of health care delivery *systems*\*.
- 2) Identify individual roles and responsibilities within a system.
- 3) Identify the impact of changing demographics in society on health care delivery systems.
- 4) Identify trends affecting the delivery systems of health care.
- 5) Identify the impact of local, national and global economics on health care delivery systems.

\**Systems* - interacting and/or interdependent groups of individuals and/or sets of principles, functions, operations, and procedures that achieve a common purpose.

## Skills and Knowledge

definitions of current concepts and terminology  
primary, secondary, tertiary levels of care  
demographics  
special populations needs  
    (e.g. homeless, persons with disabilities, age groups)  
basic public health statistics  
introduction to systems theory, change theory  
  
roles, responsibilities, education and composition of  
    the health care team members  
community resources and networks  
  
evolution of health care  
    history of health care  
    current health care reform issues  
        (i.e. cost containment, impact of technology,  
            preventive vs. treatment)  
types of delivery systems

types of reimbursement systems  
    managed care/fee for service  
    federal  
    private  
    state  
    self pay  
  
introduction to quality management (i.e. TQM, CQI)  
emerging issues  
patient satisfaction  
quality of care vs. cost  
cost effectiveness



## 9. *Technology*

Demonstrate the effective use and application of technologies appropriate to health care services.

- 1) Identify and discuss the role and impact of *technology*\* on the individual, the society and the work place.
- 2) Demonstrate an awareness of change in technology and its effect on the delivery of health care services.
- 3) Observe the use of technology in the delivery of specific health care services or in accomodating employment.
- 4) Demonstrate effective use of computer technology for information processing and the preparation of written, tabular and graphic materials.
- 5) Access, input and transmit information electronically.

\**Technology* - the application of methods that increase the productivity of health services providers by reducing manual operations and providing an increased rate and quality of information.

## **Skills and Knowledge**

impact on the consumer (including people with disabilities)  
importance of productivity in industry efficient systems  
impact on marketing of products  
impact on social interactions  
impact on diagnosis  
impact on the life span  
impact on work times and sites

technology ethical issues, including life support, genetic engineering, etc.  
cost of technology

role of research and development  
professional obligation with use of technology  
legal aspects such as confidentiality, copyright

historical perspective of changes in health care practices  
bioengineering (including importance of calibration of instruments and schedule service contracts)  
diagnostic technology and treatment such as laser technology, imaging, virtual reality,  
telemedicine, physiological monitoring

electronic communications such as voice mail, fax, cellular phone, Internet, netiquette, E-mail  
use of spread sheets such as scheduling, billing  
use of database for inventory, supplies, patient scheduling, patient records  
data entry  
desktop publishing  
multimedia reports  
medical/dental office management software systems



## *10. Socioeconomic and Cultural Awareness/Sensitivity*

Demonstrate understanding of the community as it would apply to patients as well as health care personnel.

- 1) Discuss interaction among emerging issues, environmental conditions and the various cultures to which one belongs.
- 2) Identify services and resources that support cultural values.
- 3) Apply basic strategies for dealing with diversity\*.

*\*Diversity* - includes differences based on gender, sexual orientation, culture, race, ethnicity, age, language, religion, disabilities, socioeconomic class or any other factor which might separate individuals or groups



## **Skills and Knowledge**

history of health care in Hawai'i  
community resources that support cultural values  
projections for the future  
demographics  
    current immigration  
    disparate population

cultural norms of Hawai'i's diverse groups  
alternative health care practices  
customer service

strategies which respect differences  
"disability awareness"  
cultural adaptations to health care

social and ethnic differences (see Standard 7)  
emerging social and cultural issues  
changes in primary relationship patterns

**Report**  
**on**  
**Hospitality and Tourism Industry Skill Standards**  
**for Hawai'i**

**February 1997**

- A. Understanding of the Tourism Industry/Economy**
- B. Oral and Written Communication**
- C. Math and Accounting**
- D. Sanitation/Safety/Emergency/Security**
- E. Law**
- F. Ethics**
- G. Computers/Technology/Maintenance/Engineering**
- H. Foreign Languages and Cultures**
- I. "Hospitality" Attitude/Spirit of Aloha**
- J. Leadership/Teamwork**
- K. Food Service**
- L.. Environment**
- M. Groundskeeping (Specialty)**
- N. Sales and Marketing (Specialty)**

**Hospitality & Tourism Skill Standards Committee**  
**for**  
**Hawai'i State Tourism Training Council**  
**Department of Labor and Industrial Relations**

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**A. Hospitality and Tourism Industry Skill Standards**

**B. Crosswalk**

**C Method**

## HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS

A committee of Hawai'i's Hospitality and Tourism industry and educators has developed and validated skill standards for their industry (Appendix A). Appendix C describes the method and participants. Reaction and input is welcomed and will be used to revise the standards.

[Fax input to Tourism Training Council at 586-8674.]

### Purposes

- The 73 "A" level standards are the basis for a Certificate of Advanced Mastery (CAM) in Hospitality and reflect what employers expect high school graduates to achieve to be job-ready for the high-performance workplace.
- Some high school graduates with a CAM in Hospitality will go directly into the workforce. If they enter the hospitality industry, the 50 "B" level skills are the additional skills they will need to learn in the workplace.
- Other high school graduates may go on to college and major in the hospitality industry. These people will need to learn at least that which is minimum in the workplace (the "A" and "B" level skills), as well as the more advanced skills required by their degree (not covered by this committee). Those who already hold a CAM in Hospitality will be able to take more advanced courses upon entering college.

### Gaps between DOE goals and industry expectations

The Board of Education's priority document is the *Hawai'i Content and Performance Standards* (HCPS), supplemented by DOE documents, *Essential Content* and *Student Outcomes*. Therefore, it is important to determine the degree of mesh between the industry skill standards and the existing Department of Education (DOE) curriculum goals by performing a "crosswalk." (Appendix B) This analysis points out the gaps between DOE goals and industry expectations.

Analysis of the 73 "A" level of Tourism Industry Skill Standards shows:

1. Twenty-six (36%) of the skill standards give greater definition to the SCANS skills which employers have defined as necessary for the workplace. The committee's underlying premise was that SCANS skills (shown on page 7) are necessary in the workplace, and the committee did not spend time validating the SCANS skills.
2. Twenty-seven (37%) of the skill standards mesh with DOE's HCPS.

3. Forty-six (63%) of the skill standards appear to be over and above the DOE's HCPS, but 15 of these (21% of the total) mesh with DOE's *Essential Content*; six (8%) may be very specific to the hospitality industry.
4. The most serious gaps are in math and accounting, followed by intercultural communication, hospitality attitude, and understanding of the tourism industry.

The specific breakdown follows:

A. Understanding of the Tourism Industry/Economy:

10 skills:      3 are covered by HCPS.  
                     1 is covered by EC.  
                     3 could easily be incorporated in Social Studies.  
                     3 others are not covered.

The EC skill is: "Know the role of government in the industry; community involvement and fulfillment of civic responsibility by the industry."

1 "B" level skill is covered by HCPS: "Know how Hawai'i's economy is impacted by Hawai'i's competing destinations, world events, and competition for visitor's discretionary funds."

Not covered are the areas which the visitor industry itself has been slow to recognize as important:

- "Outline the guidelines for sustainable, responsible tourism."
- "Know the importance of the Native Hawaiian host culture to the success of the visitor destination."
- "Know the importance of natural and cultural resources to the success of the visitor destination."

B. Oral and Written Communication

10 skills:      All expand on the SCANS skills.  
                     9 are covered by HCPS.  
  
                     1 skill re nonverbal communication is covered only by EC  
                     for Business Education.

C. Math and Accounting

6 skills          All expand on the SCANS skills.  
                     1 is covered by the HCPS.  
                     5 are not covered by HCPS or EC.

This is the most serious disparity between Tourism Industry Skill Standards and DOE's policy documents.

D. Sanitation/Safety/Emergency/Security

10 skills: 4 are covered by the HCPS.

1, re preventing transmission of communicable diseases, is covered by EC in Health.

1, "Understand implications of drug use and necessity for drug-free workplace," could easily be incorporated into core courses.

E. Law

5 skills: 1, "Know constitutional rights," is covered by HCPS.  
4 are not covered.

F. Ethics

3 skills: None are covered by HCPS.  
2 are covered by the Honesty and Integrity theme.  
1, "Consider company/professional policy," is not covered.

G. Computers/Technology/Maintenance/Engineering

4 skills All are work-related activities based on the SCANS skills.  
2 are covered by the HCPS.

2 are not covered, but may be quite specific to the visitor industry.

5 are not covered.

H. Foreign Languages and Cultures

5 skills: 2 are covered by HCPS for core courses.

3 are covered by ES for any student who elects to take foreign language.

If intercultural communication is really not covered in the DOE, it should be incorporated into core courses. This is a necessary skill for living peaceably in the state.

I. "Hospitality" Attitude/Spirit of Aloha

6 skills: 2 are covered by HCPS.

Unknown is to what degree the Hawaiian Studies theme of EC covers all these skills.

The pukas in Hospitality Attitude and Understanding of Tourism represent a serious disparity between Tourism Industry Skills and the

HCPS. This gap may not be as serious if Hawaiian Studies in EC covers the skills and the EC carries weight as a policy document

J. Leadership/Teamwork

7 skills: All expand on the SCANS skills.  
1 is covered by HCPS.

1, "Work as a team member," is covered by a Foundation Objective

1, "Understand human psychology," is covered by EC for Business Education

1, "Evaluate and correct one's own performance," could easily be incorporated in all courses.

3 are not covered.

2 "B" level skills are covered by the HCPS: "Be able to organize tasks and prepare work plans;" and "Assign and schedule work."

K. Food Service

7 skills 2 are covered by HCPS.

1 re food spoilage and foodborne illnesses is in EC for Science.

4 are not covered, but may be quite specific to the visitor industry.

L. Environment

0 skills: None of the proposed skills were validated as essential, important, or desirable.

Analysis of the 11 "A" level skill standards in the two specialty areas shows:

M. Groundskeeping Specialty

4 skills: 1 is covered by EC for Agriculture.  
3 are not specified in EC for Agriculture.

N. Sales and Marketing Specialty

7 skills: 1 is covered by EC for Business Education.  
6 are not covered.

Quoted from JOB SKILLS FOR THE 21ST CENTURY  
By Lawrence K. Jones

BASIC SKILLS		
<b>Reading:</b> identify relevant facts; locate information in books/ manuals; find meaning of unknown words; judge accuracy of reports: use computer to find information.	ideas and effort; do own share of work; encourage team members; resolve differences for the benefit of the team; responsibly challenge existing procedures, policies, or authorities.	
<b>Writing:</b> write ideas completely and accurately in letters and reports with proper grammar, spelling, and punctuation, use computer to communicate information.	<b>Cultural Diversity:</b> work well with people having different ethnic, social, or educational backgrounds; understand the cultural differences of different groups; help the people in these groups make cultural adjustments when necessary.	
<b>Mathematics:</b> use numbers, fractions, and percentages to solve problems; use tables, graphs, and charts; use computer to enter, retrieve, change, and communicate numerical information.	PERSONAL QUALITIES	
<b>Speaking:</b> speak clearly; select language, tone of voice, and gestures appropriate to audience.	<b>Self-Esteem:</b> understand how beliefs affect how a person feels and acts; "listen" and identify irrational or harmful beliefs you may have; and understand how to change them when they occur.	
<b>Listening:</b> listen carefully to what person says, noting tone of voice and body language; respond in a way that shows understanding of what is said.	<b>Self-Management:</b> assess own knowledge and skills accurately; set specific, realistic personal goals; monitor progress toward goal.	
PEOPLE SKILLS		<b>Responsibility:</b> work hard to reach goals, even if task is unpleasant; do quality work; display high standard of attendance, honesty, energy, and optimism.
<b>Social:</b> show understanding, friendliness, and respect for feelings of others; assert oneself when appropriate; take an interest in what people say and why they think and act as they do.	THINKING SKILLS	
<b>Negotiation:</b> Identify common goals among different parties; clearly present your position; understand party's position; examine possible options; make reasonable compromises.	<b>Creative Thinking:</b> use imagination freely, combining ideas or information in new ways; make connections between ideas that seem unrelated.	
<b>Leadership:</b> communicate thoughts and feelings to justify a position; encourage or convince; make positive use of rules or values; demonstrate ability to have others believe in and trust you because of competence and honesty.	<b>Problem-Solving:</b> recognize problem; identify why it is a problem; create and implement a solution; watch to see how well solution works; revise as needed.	
<b>Teamwork:</b> contribute to group with	<b>Decision Making:</b> identify goals; generate alternatives and gather information about them; weigh pros and cons; choose best alternative; plan how to carry out choice.	
	<b>Visualization:</b> imagine building, object, or system by looking at a blueprint or drawing.	



## APPENDIX A: HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)

### UNDERSTANDING OF THE TOURISM INDUSTRY/ECONOMY

(Page 1 of 2)

"A" Level	Certificate of Advanced Mastery	"B" Level	To learn in Community College or the workplace
<b>Industry Skill Standard A.</b> Understand the tourism industry			
1. Define the various traveler groups and the reasons for travel.	<b>Essential</b>	1. Describe the trends and economic impact of various traveler groups.	<b>Essential</b>
2. Describe how tourism is the largest industry in the world and list the economic effects and interrelationships of tourism on Hawai'i.	<b>Essential</b>		
3. List Hawai'i's destination competitors.	<b>Desirable</b>	2. Describe how Hawai'i's economy is impacted by Hawai'i's competing destinations, world events, and competition for discretionary funds.	<b>Important</b>
4. List the range of products and services and describe the simple organization of the visitor industry; i.e., sub-industries and career ladders for each.	<b>Essential</b>	3. Describe the complex interrelationships of the different products and services in the visitor industry.	<b>Important</b>
5. Describe the role of government, community involvement, and fulfilling civic responsibilities.	<b>Important</b>	4. Describe the organizations (e.g., government, private associations) in the visitor industry.	<b>Desirable</b>
6. List and describe the career opportunities in the visitor industry.	<b>Essential</b>		
7. List which industries are service industries; e.g., Healthcare, Education, Tourism	<b>Desirable</b>		
8. Describe the importance of the Native Hawaiian host culture to the success of the visitor destination.	<b>Essential</b>		
9. Describe the importance of natural and cultural resources to the success of the visitor destination. <ul style="list-style-type: none"> <li>• Basic historical facts</li> <li>• Basic geography</li> <li>• Significant current events</li> </ul>	<b>Essential</b>		

## **APPENDIX A: HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)**

### **UNDERSTANDING OF THE TOURISM INDUSTRY/ECONOMY**

(Page 2 of 2)

#### **"A" Level**

#### **Certificate of Advanced Mastery**

- |   |                  |
|---|------------------|
| 10. Outline the guidelines for sustainable, responsible tourism;<br>i.e., <ul style="list-style-type: none"><li>a. Develop tourism product which represents what the residents themselves want and can generally afford.</li><li>b. Develop tourism which strengthens the local culture.</li><li>c. Develop tourism only if local labor and other community infrastructure can support it.</li><li>d. Protect environment; e.g., do not disturb or remove articles from natural or historic sites; use marked paths; use environmentally-sound methods of transportation.</li><li>e. Promote and use indigenous products.</li><li>f. Do not buy products made from endangered plants or animals.</li><li>g. Be informed about customs, manners and culture of area.</li><li>h. Respect others' right to privacy.</li><li>i. Know problematical issues of tourism.</li></ul> | <b>Important</b> |
|---|------------------|

## APPENDIX A: HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)

### ORAL AND WRITTEN COMMUNICATION

"A" Level	Certificate of Advanced Mastery	"B" Level	To learn in Community College or the workplace
<b>Industry Skill Standard B.</b> Communicate effectively orally and in writing. [Note: these standards expand on SCANS skills.]			
1. Demonstrate the purposes of effective communication.	<b>Essential</b>	1. Demonstrate effective oral communication by speaking clearly, with standard English and persuasively as the job requires, such as in face-to-face exchanges and handling telephone calls.	<b>Essential</b>
a. To inform			
b. To express feelings, empathy			
c. To imagine			
d. To influence			
e. To meet social expectations			
f. To solve problems			
g. To resolve conflicts			
h. To negotiate			
i. To get information			
j. To seek clarification			
2. Speak clearly and with standard English in appropriate situations.	<b>Essential</b>		
3. Listen effectively; follow oral instructions.	<b>Essential</b>	2. Discuss the results of ineffective communication.	<b>Essential</b>
4. Interpret nonverbal cues with oral communication such as facial expression, gestures and eye contact that help to make meanings clear.	<b>Desirable</b>		
5. Take a basic phone message; get information over the phone.	<b>Essential</b>		
6. Give clear directions to another person.	<b>Essential</b>	3. Explain company services.	<b>Essential</b>
7. Communicate with courtesy and friendliness to make others feel at ease.	<b>Essential</b>		
8. Understand and respond appropriately to routine visitor requests.	<b>Essential</b>	4. Make and change reservations; resolve issues.	<b>Essential</b>
9. Read maps.	<b>Essential</b>		
10. Receive and appropriately act on clearly written, simple instructions	<b>Essential</b>		

## APPENDIX A: HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)

### MATH AND ACCOUNTING

"A" Level	Certificate of Advanced Mastery	"B" Level	To learn in Community College or the workplace
<b>Industry Skill Standard C.</b> Perform math and accounting [Note: These standards expand on SCANS skills.]			
1. Conduct cash and credit transactions (handle cash, understand debit and credit concepts, calculate percent discounts, convert currency, balance cash, reconcile statements).	<b>Essential</b>	1. Identify controls for cash collection, check cashing, and the acceptance and processing of credit cards.	<b>Essential</b>
2. Conduct payroll and disbursement (account for tips/wages/hours/commissions, prepare time sheets, validate delivery invoices and accounts payable, analyse purchase discounts & penalties).	<b>Essential</b>	2. Identify the major kinds of payroll costs.	<b>Important</b>
3. Demonstrate the budget planning process.	<b>Essential</b>	3. Conduct basic accounting (prepare and validate various accounting and budgetary reports, know bookkeeping, general, cost and tax accounting principles).	<b>Essential</b>
4. Create and validate numerical reports; understand graphs and tables.	<b>Essential</b>		
5. Measure, scale, maintain proportions in recipes and mixtures, use standard weights and measures.	<b>Essential</b>		
6. Control inventory (prepare purchase orders, maintain and validate stock levels, issue and distribute merchandise, maintain accurate records).	<b>Essential</b>		

## APPENDIX A: HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)

### SANITATION/SAFETY/EMERGENCY/SECURITY

"A" Level	Certificate of Advanced Mastery	"B" Level	To learn in Community College or the workplace
<b>Industry Skill Standard D.</b> Practice sanitation, safety, and security measures.			
1. Identify and demonstrate concern for personal hygiene.	<b>Essential</b>	1. Describe operation's responsibility for guest safety, security, privacy.	<b>Essential</b>
2. Identify the difference between sanitary and clean as they pertain to people, equipment and facilities.	<b>Essential</b>	2. Identify insects and rodent infestation and measures to prevent infestation problems.	<b>Important</b>
3. Understand and practice procedures for preventing transmission of communicable diseases (Hepatitis, HIV).	<b>Essential</b>	3. Able to complete a sanitation and safety inspection in a hospitality operation.	<b>Important</b>
4. Demonstrate safe use, care, cleaning, and maintenance of basic tools and equipment.	<b>Essential</b>	4. Describe common causes and prevention of accidents and injuries in the visitor industry.	<b>Essential</b>
5. Demonstrate proper use of cleaning equipment and supplies.	<b>Important</b>	5. Apply general knowledge of hazardous materials common in the visitor industry, their properties, and proper handling.	<b>Essential</b>
6. Observe, describe, and accurately report incidents affecting sanitation, safety or security.	<b>Essential</b>	6. Recognize suspicious activities and persons.	<b>Important</b>
7. Describe and practice how to prevent breaches in sanitation, safety and security.	<b>Essential</b>	7. Describe common causes and practices which lead to unsafe and unsanitary conditions.	<b>Essential</b>
8. Demonstrate first aid/emergency procedures.	<b>Desirable</b>	8. Able to deal with emergencies, such as sudden illness, accident, or interrupted service.	<b>Essential</b>
9. Explain implications of drug use and necessity for drug-free workplace.	<b>Essential</b>	9. Practice company's policies and procedures for security and emergencies. [company training only]	<b>Essential</b>
10. Demonstrate safe physical movement (e.g., lifting and work habits) to prevent injury/accidents.	<b>Essential</b>	10. Use properly the safety and security equipment which is within one's responsibility; e.g., locks, safety alarms, communication, surveillance.	<b>Essential</b>
		11. List agencies concerned with safety and sanitation issues (e.g., OSH, FAA, Board of Health)	<b>Desirable</b>

## APPENDIX A: HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)

### LAW

"A" Level	Certificate of Advanced Mastery	"B" Level	To learn in Community College or the workplace
<b>Industry Skill Standard E.</b> Understand law which affects the individual and the workplace.			
1. Know constitutional rights.	<b>Essential</b>	1. Be aware of illegal, liable and negligent actions while performing work in the visitor industry.	<b>Essential</b>
2. Be aware of laws governing employment; i.e., wage and hours, immigration, federal social security, unemployment, workers compensation, Americans with Disabilities, equal opportunity, sexual harassment, affirmative action, gender equity, occupational safety and health.	<b>Important</b>	2. Know the withholding and reporting requirements of the income tax laws.	<b>Important</b>
3. Describe what constitutes criminal behavior.	<b>Important</b>		
4. Describe differences between local, state and federal laws.	<b>Desirable</b>		
5. Describe liquor laws.	<b>Important</b>	3. Understand and abide by liquor laws and responsibility.	<b>Important</b>

## APPENDIX A: HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)

### ETHICS

"A" Level	Certificate of Advanced Mastery	"B" Level	To learn in Community College or the workplace
<b>Industry Skill Standard F.</b> Define the basic principles of ethics.			
1. Be true to principles of honesty and integrity; if something is bothering me, ask:	<b>Essential</b>		
a. Is it really an issue?			
b. Am I afraid to do what I know is right?			
c. Is my action consistent with my basic values and personal commitments with the organization's values?			
d. Could I share my decision in good conscience with my family? with colleagues and customers?			
2. Consider how others (e.g., customers, shareowners, co-workers) will be affected by one's decision.	<b>Essential</b>	1. Consider how others (e.g., customers, shareowners, co-workers) will be affected by one's decision.	<b>Essential</b>
a. Am I honest and fair and do I avoid harm to others?		a. What about promise-keeping and protecting the integrity of data?	
b. What would happen if I do/do not act?		b. Do I solicit gifts for performance of my responsibilities?	
		c. Do I charge different prices for the same service or product?	
3. Consider company/professional policy; e.g.,	<b>Essential</b>	2. Consider company/professional policy; e.g.,	<b>Essential</b>
a. Where can I get advice?		a. What does my supervisor think? What does HR or legal advise? Should I call the Office of Business Practices?	
b. What is my legal obligation?		b. Am I assuring that the company is honest; e.g., avoiding false advertising?	
c. Do I take advantage of my position?		c. Am I lobbying for personal gain?	
d. Do I abide by the code of conduct; e.g., avoid drug use, gambling, and conduct which violates common decency and morality?		d. Is what I am doing a conflict of interest for personal gain?	

## APPENDIX A: HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)

### COMPUTERS/TECHNOLOGY/MAINTENANCE/ENGINEERING

"A" Level	Certificate of Advanced Mastery	"B" Level	To learn in Community College or the workplace
<b>Industry Skill Standard G.</b> Use technology specific to the visitor industry. [Note: These standards expand on SCANS skills.]			
1. Operate a computer.	<b>Essential</b>		
2. Describe how computers are used in each sector of the visitor industry.	<b>Desirable</b>		
3. Use basic computer spreadsheet programs and their application in cost control.	<b>Desirable</b>		
4. Describe industry-specific equipment and systems (cash registers, merchant charge terminals, ticketing systems, computerized inventory control systems).	<b>Desirable</b>		



## APPENDIX A: HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)

### FOREIGN LANGUAGES AND CULTURES

"A" Level	Certificate of Advanced Mastery	"B" Level	To learn in Community College or the workplace
<b>Industry Skill Standard H.</b> Be familiar with foreign cultures and languages.			
1. Understand own self, culture and cultural filters, to communicate better with different cultures.	<b>Essential</b>	1. Use steps and resources to find out and deal with requests by foreigners.	<b>Essential</b>
2. Be aware that cultural background affects communication styles and interpretations.	<b>Important</b>	2. Use currency and numbers of other cultures.	<b>Desirable</b>
3. Describe how values are shaped by culture; e.g., attitude toward strangers, expressions of hospitality, spatial relationships, privacy, independence, relationships, gender roles, religion.	<b>Important</b>		
4. Know world geography, time zones.	<b>Essential</b>		
5. Speak a foreign language.	<b>Desirable</b>	3. Use basic greetings and courtesies in different languages (good morning, thankyou, goodbye).	<b>Desirable</b>

## APPENDIX A: HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)

### "HOSPITALITY" ATTITUDE/SPIRIT OF ALOHA

"A" Level	Certificate of Advanced Mastery	"B" Level	To learn in Community College or the workplace
<b>Industry Skill Standard I.</b> Enrich quality customer service and internal working relationships with Hawaianness and the Spirit of Aloha.			
1. Know yourself: mind, emotion, past experience, attitudes, behavior, spirit.	<b>Essential</b>	1. Describe the role of host versus servant; role of host to guest.	<b>Essential</b>
2. Give quality service to customers; be sensitive and attentive to customers' needs.	<b>Essential</b>	2. Be flexible in performing a variety of activities that change frequently and sometimes without notice.	<b>Essential</b>
3. Understand and demonstrate the spirit of Aloha.	<b>Essential</b>		
<p>Aloha is defined in the Pukui-Elbert dictionary as love, affection, mercy, compassion, pity, kindness, charity; greeting, regards; sweetheart, loved one; beloved, loving; to love, show kindness, mercy, pity, charity, affection, greet, hail.</p> <p>Hawai'i's statutes (HRS 5-7.5) define Aloha Spirit: ... is the coordination of mind and heart within each person. It brings each person to the self. Each person must think and emote good feelings to others. In the contemplation and presence of the life force, "Aloha," the following unihi laulā loa:</p> <p>Akahai      kindness to be expressed with tenderness  Lōkahi      unity, to be expressed with harmony  'Olu'olu      agreeable, to be expressed with pleasantness  Ha'aha'a      humility, to be expressed with modesty  Ahonui      patience, to be expressed with perserverance</p>			
4. Know your "place" (Hawai'i).	<b>Essential</b>	3. Know your "place" (the specific history and features of your worksite).	<b>Essential</b>
5. Understand Hawaiian values, relate them to your own culture's values, and integrate them into how you work.	<b>Important</b>	4. Take responsibility for resolving customers' requests; know how to resolve/negotiate/empathize.	<b>Essential</b>
6. Use Hawaiian language as an entree to the culture.	<b>Important</b>		

## APPENDIX A: HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)

### LEADERSHIP/TEAMWORK

"A" Level	Certificate of Advanced Mastery	"B" Level	To learn in Community College or the workplace
<b>Industry Skill Standard J.</b> Demonstrate leadership [NOTE: These standards expand on SCANS skills.]			
1. Organize work area; supply/maintain/ keep it in working condition.	<b>Essential</b>	1. Be able to organize tasks and prepare work plans.	<b>Essential</b>
2. Evaluate and correct one's own performance.	<b>Essential</b>	2. Train newly hired peers.	<b>Important</b>
3. Work as a team member.	<b>Essential</b>	3. Build teams.	<b>Essential</b>
		4. Assign and schedule work.	<b>Important</b>
4. Identify methods for recognizing employee contributions; motivating employees.	<b>Important</b>	5. Analyze possible problem situations which impact on-the-job relationships.	<b>Essential</b>
5. Monitor customer satisfaction.	<b>Important</b>		
6. Make improvements in a task using work simplification.	<b>Desirable</b>	6. Identify a better way to do part of one's work.	<b>Essential</b>
7. Discuss human psychology; i.e., motives, personalities, attitudes.	<b>Desirable</b>		

## APPENDIX A: HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)

### FOOD SERVICE

Those who choose to study the food service specialty will meet many more skill standards, as determined by the Tech-Prep committee, than are included here. The following skill standards related to food service are basic for all who choose the hospitality industry as their career.

#### "A" Level Certificate of Advanced Mastery

**Industry Skill Standard K.** Apply basic food service principles.

- |  |                  |
|--|------------------|
| 1. Describe the conditions under which food will spoil and causes of foodborne illnesses can grow. | <b>Essential</b> |
| 2. Inspect facility for compliance with health and sanitation laws.                                | <b>Essential</b> |
| 3. Demonstrate correct safe and sanitary practices when preparing and serving food.                | <b>Essential</b> |
| 4. Demonstrate correct safe and sanitary practices in maintaining the kitchen and dining room.     | <b>Essential</b> |
| 5. List and explain the nutritional considerations that go into menu planning.                     | <b>Desirable</b> |
| 6. Plan a balanced menu that meets the requirements of a well-planned menu.                        | <b>Important</b> |
| 7. Apply basic mathematical skills to conversion of recipes.                                       | <b>Essential</b> |

#### "B" Level To learn in Community College or the workplace

- |  |                  |
|--|------------------|
| 1. List the major reasons for food spoilage and recognize signs of food spoilage.                    | <b>Essential</b> |
| 2. Demonstrate safe handling and cleaning procedures of industrial equipment.                        | <b>Essential</b> |
| 3. Demonstrate safe use of basic hand tools.   | <b>Essential</b> |
| 4. Explain the different types of table service.   | <b>Essential</b> |
| 5. Explain the procedures for front of the house activities.   | <b>Essential</b> |
| 6. Explain interrelationships and work flow between dining room and kitchen operations.              | <b>Essential</b> |
| 7. Demonstrate fundamentals and techniques of food preparation as required at the specific facility. | <b>Essential</b> |

## APPENDIX A: HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)

### ENVIRONMENT

**"A" Level**                      **Certificate of Advanced Mastery**

**Industry Skill Standard L.** Preserve the environment.

**"B" Level**                      **To learn in Community College or the workplace**

- |  |                  |
|--|------------------|
| 1. Describe strategies which reduce waste generation.                                | <b>Desirable</b> |
| 2. Describe strategies which preserve and conserve the environment.                  | <b>Desirable</b> |
| 3. Describe/demonstrate how to protect/preserve archaeological and historical sites. | <b>Desirable</b> |

### GROUNDSKEEPING (SPECIALTY)

**Industry Skill Standard M.** Maintain grounds

- |  |                  |   |                  |
|--|------------------|---|------------------|
| 1. Maintain landscape, plants, lawn, and equipment.                          | <b>Essential</b> | 1. Construct and/or design landscape projects from blueprint designs.               | <b>Desirable</b> |
| 2. Identify, select, plant and care for plants, including indigenous plants. | <b>Important</b> | 2. Care for and manage wildlife and domestic animals.                               | <b>Desirable</b> |
| 3. Maintain irrigation system and explain fundamentals of water management.  | <b>Desirable</b> | 3. Explain and apply organic and non-polluting products and chemicals as necessary. | <b>Important</b> |
| 4. Explain soil conditions.  | <b>Desirable</b> |   |                  |

## APPENDIX A: HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)

### SALES AND MARKETING (SPECIALTY)

"A" Level	Certificate of Advanced Mastery	"B" Level	To learn in Community College or the workplace
<b>Industry Skill Standard N.</b> Demonstrate basic sales and marketing skills.			
1. Have above average verbal and written communications skills.	<b>Essential</b>	1. Demonstrate creativity and responsiveness to change.	<b>Essential</b>
2. Understand the importance of the visitor.	<b>Essential</b>	2. Demonstrate time management skills.	<b>Essential</b>
3. Listen, understand and provide what the visitor desires.	<b>Essential</b>	3. Demonstrate self-motivation	<b>Essential</b>
4. Describe the roles and functions of: sales, marketing, public relations, exterior promotions.	<b>Desirable</b>	4. Identify interior promotional sales.	
		<b>Desirable</b>	
5. Know the product.	<b>Essential</b>	5. Describe the product's current and historical marketing trends; Know the local competitors	<b>Essential</b>
6. Explain the importance of the environment of the site (basic history, geography, significant current events)	<b>Important</b>	6. Describe the environment of the major competing destinations.	<b>Essential</b>
7. Identify the basic components of a marketing and sales program.	<b>Desirable</b>	7. Be aware of the components of a marketing plan for particular types of operations: <ul style="list-style-type: none"> <li>• Niche marketing</li> <li>• Target marketing</li> <li>• Pricing strategies</li> </ul>	<b>Desirable</b>
		8. Identify the components of a written marketing plan.	<b>Desirable</b>
		9. Specify how the elements of sales and marketing impact and contribute to the budget.	<b>Important</b>
		10 Describe more in-depth marketing activities: <ul style="list-style-type: none"> <li>• Information management</li> <li>• Follow up</li> <li>• Financial and risk management</li> <li>• Competitive analysis</li> </ul>	<b>Desirable</b>

**APPENDIX B: CROSSWALK BETWEEN DOE DOCUMENTS AND  
HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)**

**UNDERSTANDING OF THE TOURISM INDUSTRY/ECONOMY**

(Page 1 of 2)

<b>"A" Level</b>	<b>Certificate of Advanced Mastery</b>	<b>Crosswalk</b>
<b>Industry Skill Standard A.</b> Understand the tourism industry		
1. Define the various traveler groups and the reasons for travel.	<b>Essential</b>	could easily be incorporated in Social Studies
2. Describe how tourism is the largest industry in the world and list the economic effects and interrelationships of tourism on Hawai'i.	<b>Essential</b>	Performance Standards (PS): Social Studies
3. List Hawai'i's destination competitors.	<b>Desirable</b>	could easily be incorporated in Social Studies
4. List the range of products and services and describe the simple organization of the visitor industry; i.e., sub-industries and career ladders for each.	<b>Essential</b>	Performance Standards (PS): Social Studies
5. Describe the role of government, community involvement, and fulfilling civic responsibilities.	<b>Important</b>	Essential Content (EC): Business Education
6. List and describe the career opportunities in the visitor industry.	<b>Essential</b>	PS: Home/Work Skills
7. List which industries are service industries; e.g., Healthcare, Education, Tourism	<b>Desirable</b>	could easily be incorporated in Social Studies
8. Describe the importance of the Native Hawaiian host culture to the success of the visitor destination.	<b>Essential</b>	
9. Describe the importance of natural and cultural resources to the success of the visitor destination. <ul style="list-style-type: none"> <li>• Basic historical facts</li> <li>• Basic geography</li> <li>• Significant current events</li> </ul>	<b>Essential</b>	

**APPENDIX B: CROSSWALK BETWEEN DOE DOCUMENTS AND  
HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)**

**UNDERSTANDING OF THE TOURISM INDUSTRY/ECONOMY**

(Page 2 of 2)

<b>"A" Level</b>	<b>Certificate of Advanced Mastery</b>	<b>Crosswalk</b>
10. Outline the guidelines for sustainable, responsible tourism; i.e., <ul style="list-style-type: none"> <li>a. Develop tourism product which represents what the residents themselves want and can generally afford.</li> <li>b. Develop tourism which strengthens the local culture.</li> <li>c. Develop tourism only if local labor and other community infrastructure can support it.</li> <li>d. Protect environment; e.g., do not disturb or remove articles from natural or historic sites; use marked paths; use environmentally-sound methods of transportation.</li> <li>e. Promote and use indigenous products.</li> <li>f. Do not buy products made from endangered plants or animals.</li> <li>g. Be informed about customs, manners and culture of area.</li> <li>h. Respect others' right to privacy.</li> <li>i. Know problematical issues of tourism.</li> </ul>	<b>Important</b>	Essential Content (EC): Health
9. Know the importance of the Native Hawaiian host culture to the success of the visitor destination.	<b>Essential</b>	EC: Social Studies
10. Know the importance of natural and cultural resources to the success of the visitor destination. <ul style="list-style-type: none"> <li>• Basic historical facts</li> <li>• Basic geography</li> <li>• Significant current events</li> </ul>	<b>Essential</b>	



**APPENDIX B: CROSSWALK BETWEEN DOE DOCUMENTS AND  
HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)**

**ORAL AND WRITTEN COMMUNICATION**

<b>"A" Level</b>	<b>Certificate of Advanced Mastery</b>	<b>Crosswalk</b>
<b>Industry Skill Standard B.</b> Communicate effectively orally and in writing. [Note: these standards expand on SCANS skills.]		
1. Demonstrate the purposes of effective communication.	<b>Essential</b>	Performance Standards (PS): Language Arts Essential Content (EC): Language Arts
a. To inform		
b. To express feelings, empathy		
c. To imagine		
d. To influence		
e. To meet social expectations		
f. To solve problems		PS: Language Arts
g. To resolve conflicts		
h. To negotiate		
i. To get information		
j. To seek clarification		
2. Speak clearly and with standard English in appropriate situations.	<b>Essential</b>	
3. Listen effectively; follow oral instructions.	<b>Essential</b>	PS: Language Arts
4. Interpret nonverbal cues with oral communication such as facial expression, gestures and eye contact that help to make meanings clear.	<b>Desirable</b>	EC: Business Education
5. Take a basic phone message; get information over the phone.	<b>Essential</b>	PS: Language Arts
6. Give clear directions to another person.	<b>Essential</b>	PS: Language Arts
7. Communicate with courtesy and friendliness to make others feel at ease.	<b>Essential</b>	PS: Language Arts
8. Understand and respond appropriately to routine visitor requests.	<b>Essential</b>	PS: Language Arts
9. Read maps.	<b>Essential</b>	PS: Language Arts
10. Receive and appropriately act on clearly written. simple instructions	<b>Essential</b>	PS: Language Arts; Social Studies

**APPENDIX B: CROSSWALK BETWEEN DOE DOCUMENTS AND  
HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)**

MATH AND ACCOUNTING		
"A" Level	Certificate of Advanced Mastery	Crosswalk
<b>Industry Skill Standard C.</b> Perform math and accounting [Note: These standards expand on SCANS skills.]		
1. Conduct cash and credit transactions (handle cash, understand debit and credit concepts, calculate percent discounts, convert currency, balance cash, reconcile statements).	Essential	Performance Standards (PS): Math Essential Content (EC): Math
2. Conduct payroll and disbursement (account for tips/wages/ hours/commissions, prepare time sheets, validate delivery invoices and accounts payable, analyse purchase discounts & penalties).	Essential	
3. Demonstrate the budget planning process.	Essential	
4. Create and validate numerical reports; understand graphs and tables.	Essential	
5. Measure, scale, maintain proportions in recipes and mixtures, use standard weights and measures.	Essential	
6. Control inventory (prepare purchase orders, maintain and validate stock levels, issue and distribute merchandise, maintain accurate records).	Essential	

**APPENDIX B: CROSSWALK BETWEEN DOE DOCUMENTS AND  
HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)**

**SANITATION/SAFETY/EMERGENCY/SECURITY**

<b>"A" Level</b>	<b>Certificate of Advanced Mastery</b>	<b>Crosswalk</b>
<b>Industry Skill Standard D.</b> Practice sanitation, safety, and security measures.		
1. Identify and demonstrate concern for personal hygiene.	<b>Essential</b>	Performance Standards (PS): Home/Work Skills Essential Content (EC): Health
2. Identify the difference between sanitary and clean as they pertain to people, equipment and facilities.	<b>Essential</b>	
3. Understand and practice procedures for preventing transmission of communicable diseases (Hepatitis, HIV).	<b>Essential</b>	EC: Health
4. Demonstrate safe use, care, cleaning, and maintenance of basic tools and equipment.	<b>Essential</b>	
5. Demonstrate proper use of cleaning equipment and supplies.	<b>Important</b>	
6. Observe, describe, and accurately report incidents affecting sanitation, safety or security.	<b>Essential</b>	
7. Describe and practice how to prevent breaches in sanitation, safety and security.	<b>Essential</b>	
8. Demonstrate first aid/emergency procedures.	<b>Desirable</b>	PS: Health; EC: Health
9. Explain implications of drug use and necessity for drug-free workplace.	<b>Essential</b>	could easily be incorporated in other courses
10. Demonstrate safe physical movement (e.g., lifting and work habits) to prevent injury/accidents.	<b>Essential</b>	PS: Health; EC: Health

**APPENDIX B: CROSSWALK BETWEEN DOE DOCUMENTS AND  
HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)**

LAW		
"A" Level	Certificate of Advanced Mastery	Crosswalk
<b>Industry Skill Standard E.</b> Understand law which affects the individual and the workplace.		
1. Know constitutional rights.	<b>Essential</b>	Performance Standards (PS): Social Studies PS: Home/Work Skills
2. Be aware of laws governing employment; i.e., wage and hours, immigration, federal social security, unemployment, workers compensation, Americans with Disabilities, equal opportunity, sexual harassment, affirmative action, gender equity, occupational safety and health.	<b>Important</b>	
3. Describe what constitutes criminal behavior.	<b>Important</b>	
4. Describe differences between local, state and federal laws.	<b>Desirable</b>	
5. Describe liquor laws.	<b>Important</b>	

**APPENDIX B: CROSSWALK BETWEEN DOE DOCUMENTS AND  
HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)**

**ETHICS**

<b>"A" Level</b>	<b>Certificate of Advanced Mastery</b>	<b>Crosswalk</b>
<b>Industry Skill Standard F.</b> Define the basic principles of ethics.		
1. Be true to principles of honesty and integrity; if something is bothering me, ask:	<b>Essential</b>	Honesty and Integrity Theme
a. Is it really an issue?		
b. Am I afraid to do what I know is right?		
c. Is my action consistent with my basic values and personal commitments with the organization's values?		
d. Could I share my decision in good conscience with my family? with colleagues and customers?		
2. Consider how others (e.g., customers, shareowners, co-workers) will be affected by one's decision.	<b>Essential</b>	Honesty and Integrity Theme
a. Am I honest and fair and do I avoid harm to others?		
b. What would happen if I do/do not act?		
3. Consider company/professional policy; e.g.,	<b>Essential</b>	
a. Where can I get advice?		
b. What is my legal obligation?		
c. Do I take advantage of my position?		
d. Do I abide by the code of conduct; e.g., avoid drug use, gambling, and conduct which violates common decency and morality?		

**APPENDIX B: CROSSWALK BETWEEN DOE DOCUMENTS AND  
HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)**

**COMPUTERS/TECHNOLOGY/MAINTENANCE/ENGINEERING**

<b>"A" Level</b>	<b>Certificate of Advanced Mastery</b>	<b>Crosswalk</b>
<b>Industry Skill Standard G.</b> Use technology specific to the visitor industry. [Note: These standards expand on SCANS skills.]		
1. Operate a computer.	<b>Essential</b>	Performance Standards (PS): Technology & Society
2. Describe how computers are used in each sector of the visitor industry.	<b>Desirable</b>	
3. Use basic computer spreadsheet programs and their application in cost control.	<b>Desirable</b>	Performance Standards (PS): Technology & Society Essential Content (EC): Business Education
4. Describe industry-specific equipment and systems (cash registers, merchant charge terminals, ticketing systems, computerized inventory control systems).	<b>Desirable</b>	

**APPENDIX B: CROSSWALK BETWEEN DOE DOCUMENTS AND  
HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)**

**FOREIGN LANGUAGES AND CULTURES**

<b>"A" Level</b>	<b>Certificate of Advanced Mastery</b>	<b>Crosswalk</b>
<b>Industry Skill Standard H.</b> Be familiar with foreign cultures and languages.		
1. Understand own self, culture and cultural filters, to communicate better with different cultures.	<b>Essential</b>	Essential Content (EC): Language study
2. Be aware that cultural background affects communication styles and interpretations.	<b>Important</b>	Performance Standards (PS): Home/Work Skills EC: Social Studies, Business Ed, Language study
3. Describe how values are shaped by culture; e.g., attitude toward strangers, expressions of hospitality, spatial relationships, privacy, independence, relationships, gender roles, religion.	<b>Important</b>	EC: Language study
4. Know world geography, time zones.	<b>Essential</b>	PS: Social Studies
5. Speak a foreign language.	<b>Desirable</b>	PS: Language study (long-range goal) NOTE: Performance Standards for Language study have specific cultural awareness and appreciation

**APPENDIX B: CROSSWALK BETWEEN DOE DOCUMENTS AND  
HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)**

**"HOSPITALITY" ATTITUDE/SPIRIT OF ALOHA**

<b>"A" Level</b>	<b>Certificate of Advanced Mastery</b>	<b>Crosswalk</b>
<b>Industry Skill Standard I.</b> Enrich quality customer service and internal working relationships with Hawaianness and the Spirit of Aloha.		
1. Know yourself: mind, emotion, past experience, attitudes, behavior, spirit.	<b>Essential</b>	Essential Content (EC): Hawaiian Studies theme??
2. Give quality service to customers; be sensitive and attentive to customers' needs.	<b>Essential</b>	Performance Standards (PS): Home/Work Skills EC: Business Education??
3. Understand and demonstrate the spirit of Aloha.	<b>Essential</b>	EC: Hawaiian Studies theme??
<p>Aloha is defined in the Pukui-Elbert dictionary as love, affection, mercy, compassion, pity, kindness, charity; greeting, regards; sweetheart, loved one; beloved, loving; to love, show kindness, mercy, pity, charity, affection, greet, hail.</p> <p>Hawai'i's statutes (HRS 5-7.5) define Aloha Spirit: ... is the coordination of mind and heart within each person. It brings each person to the self. Each person must think and emote good feelings to others. In the contemplation and presence of the life force, "Aloha," the following unihi laulā loa:</p> <p>Akahai      kindness to be expressed with tenderness  Lōkahi      unity, to be expressed with harmony  'Olu'olu      agreeable, to be expressed with pleasantness  Ha'aha'a      humility, to be expressed with modesty  Ahonui      patience, to be expressed with perserverance</p>		
4. Know your "place" (Hawai'i).	<b>Essential</b>	PS: Social Studies;    EC: Hawaiian Studies theme??
5. Understand Hawaiian values, relate them to your own culture's values, and integrate them into how you work.	<b>Important</b>	EC: Hawaiian Studies theme??
6. Use Hawaiian language as an entree to the culture.	<b>Important</b>	EC: Language;      Hawaiian Studies theme??



**APPENDIX B: CROSSWALK BETWEEN DOE DOCUMENTS AND  
HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)**

**LEADERSHIP/TEAMWORK**

<b>"A" Level</b>	<b>Certificate of Advanced Mastery</b>	<b>Crosswalk</b>
<b>Industry Skill Standard J.</b> Demonstrate leadership [NOTE: These standards expand on SCANS skills.]		
1. Organize work area; supply/maintain/ keep it in working condition.	<b>Essential</b>	Performance Standards (PS): Home/Work Skills
2. Evaluate and correct one's own performance.	<b>Essential</b>	could easily be incorporated in all courses
3. Work as a team member.	<b>Essential</b>	Foundation Program Objective IX
4. Identify methods for recognizing employee contributions; motivating employees.	<b>Important</b>	
5. Monitor customer satisfaction.	<b>Important</b>	
6. Make improvements in a task using work simplification.	<b>Desirable</b>	
7. Discuss human psychology; i.e., motives, personalities, attitudes.	<b>Desirable</b>	Essential Content (EC): Business Education
"B" Level skill: Be able to organize tasks and prepare work plans.		PS: Home/Work Skills EC: Business Education
"B" Level skills: Assign and schedule work		PS: Home/Work Skills EC: Business Education

**APPENDIX B: CROSSWALK BETWEEN DOE DOCUMENTS AND  
HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)**

**FOOD SERVICE**

Those who choose to study the food service specialty will meet many more skill standards, as determined by the Tech-Prep committee, than are included here. The following skill standards related to food service are basic for all who choose the hospitality industry as their career.

<b>"A" Level</b>	<b>Certificate of Advanced Mastery</b>	<b>Crosswalk</b>
<b>Industry Skill Standard K.</b> Apply basic food service principles.		
1. Describe the conditions under which food will spoil and causes of foodborne illnesses can grow.	<b>Essential</b>	Essential Content (EC): Science
2. Inspect facility for compliance with health and sanitation laws.	<b>Essential</b>	
3. Demonstrate correct safe and sanitary practices when preparing and serving food.	<b>Essential</b>	Performance Standards (PS): Home/Work Skills
4. Demonstrate correct safe and sanitary practices in maintaining the kitchen and dining room.	<b>Essential</b>	
5. List and explain the nutritional considerations that go into menu planning.	<b>Desirable</b>	PS: Home/Work Skills
6. Plan a balanced menu that meets the requirements of a well-planned menu.	<b>Important</b>	
7. Apply basic mathematical skills to conversion of recipes.	<b>Essential</b>	

APPENDIX B: CROSSWALK BETWEEN DOE DOCUMENTS AND  
HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)

ENVIRONMENT	
"A" Level	Certificate of Advanced Mastery
Industry Skill Standard L. Preserve the environment.	

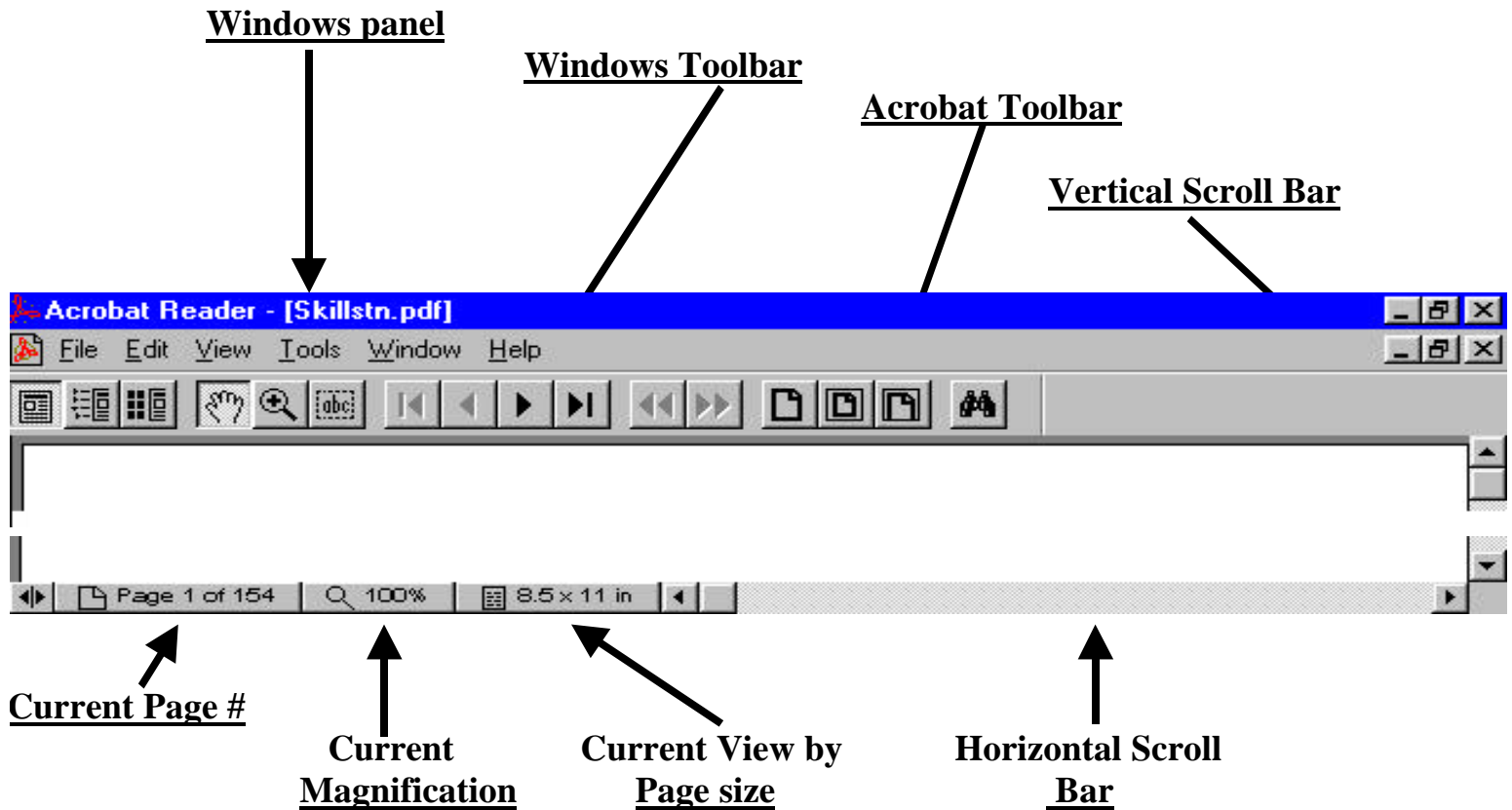
GROUNDSKEEPING (SPECIALTY)		
Industry Skill Standard M. Maintain grounds		Crosswalk
1. Maintain landscape, plants, lawn, and equipment.	Essential	Essential Content (EC): Agriculture
2. Identify, select, plant and care for plants, including indigenous plants.	Important	
3. Maintain irrigation system and explain fundamentals of water management.	Desirable	
4. Explain soil conditions.	Desirable	
4. Understand soil conditions.	Desirable	

**APPENDIX B: CROSSWALK BETWEEN DOE DOCUMENTS AND  
HOSPITALITY AND TOURISM INDUSTRY SKILL STANDARDS A-N (14 pages)**

**SALES AND MARKETING (SPECIALTY)**

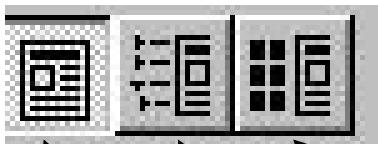
<b>"A" Level</b>	<b>Certificate of Advanced Mastery</b>	<b>Crosswalk</b>
<b>Industry Skill Standard N.</b> Demonstrate basic sales and marketing skills.		
1. Have above average verbal and written communications skills.	<b>Essential</b>	Essential Content (EC): Business Education
2. Understand the importance of the visitor.	<b>Essential</b>	
3. Listen, understand and provide what the visitor desires.	<b>Essential</b>	
4. Describe the roles and functions of: sales, marketing, public relations, exterior promotions.	<b>Desirable</b>	
5. Know the product.	<b>Essential</b>	
6. Explain the importance of the environment of the site (basic history, geography, significant current events)	<b>Important</b>	
7. Identify the basic components of a marketing and sales program.	<b>Desirable</b>	

# Navigating and Viewing text using Adobe Acrobat Reader™.



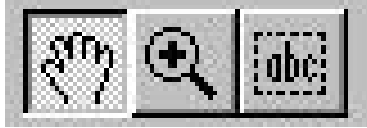
- Navigating in the Acrobat program is accomplished by using the Acrobat Tool Bar in combination with the Vertical and Horizontal Scroll Bars.

- **Screen View Mode Buttons**



- Displays: Thumbnail View and Page**
  - Displays miniature of page. Seldom used in this application.
- Displays: Bookmark View and Page**
  - Displays outline description of Page
- Displays: Full Page View**
  - Text and graphics are displayed using the full width of the screen. Maximum viewing area provided for text.

- **Tool Buttons**



Selects: the **TEXT SELECTION TOOL**

- When selected, the cursor appears similar to a capital I with dash in the center.
- Select this tool to highlight the text and graphics for copy and paste operations.

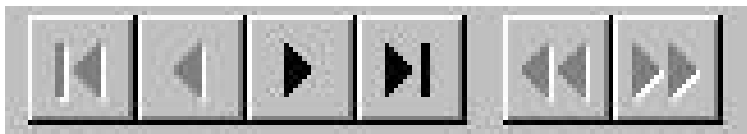
Selects the **ZOOM-IN TOOL**

- The magnifying glass replaces the cursor when selected.
- Clicking the magnifying glass causes the text and graphics underneath it to Zoom-In or be magnified. **Very useful when text and graphics are too small to clearly see.**
- Holding down the CTRL (control) key causes the symbol to change to a MINUS sign (-). Clicking with the minus sign displayed causes the text and graphics to Zoom-Out or shrink. **Use to undo magnify or zoom-in's**

Selects the **HAND TOOL**

- The hand replaces the normal mouse cursor. The HAND TOOL in the normal state appears as an OPEN HAND.
- Pressing the right mouse button causes the hand to close and GRAB the object that it is on top of. This grab is similar to the normal mouse drag except that it "GRABS" the screen below. This operation is similar to grabbing a piece of paper, it **allows you to move around the screen (piece of paper) that you grabbed.**

- **Text Page Buttons**



**GO FORWARD Button**

- Retraces your last 64 views

**GO BACK Button:**

- Go Back to return to the previous page, document, or magnification level.

**Go to LAST PAGE Button:**

- Goes to the last page of the document.

**Go to NEXT PAGE Button:**

- Goes to the next page of document.

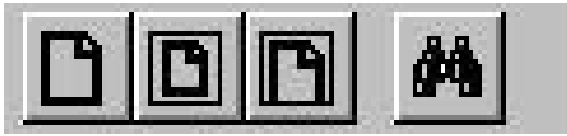
**Go to PREVIOUS PAGE Button:**

- Goes to the previous page.

**Go to FIRST PAGE Button:**

- Goes to first page of document. **Very useful to return to main menu of this document.**

## PAGE VIEW BUTTONS



### Search:

- Finds specified text in the document

### Fit Visible:

- Fills the window with the page's imaged area only (text and graphics).




### Fit Page:

- Scales the page to fit within the main window.

### Fit Width:

- Scales the page to fit the width of the main window.

## • Hints for easy viewing:

- PAGE VIEW BUTTONS, Fit Visible.
- If the hand has an arrow inside, just click to automatically resize the text as you read.
  - This  hand indicates Top of document automatic resize.
  - This  hand indicates automatic resize, reading down.
  - This  hand indicates automatic resize, end of document.
- To reverse directions:
  - Hold the down the SHIFT key while clicking the mouse.
  - The arrow in the hand points up.